



UNIVERSITAT DE
BARCELONA

Factores Gre de *Salmonella enterica* serovar Typhimurium, su papel en el control de la fisiología y patogenicidad

Tania Cristina Gaviria Cantín

ADVERTIMENT. La consulta d'aquesta tesi queda condicionada a l'acceptació de les següents condicions d'ús: La difusió d'aquesta tesi per mitjà del servei TDX (www.tdx.cat) i a través del Dipòsit Digital de la UB (deposit.ub.edu) ha estat autoritzada pels titulars dels drets de propietat intel·lectual únicament per a usos privats emmarcats en activitats d'investigació i docència. No s'autoritza la seva reproducció amb finalitats de lucre ni la seva difusió i posada a disposició des d'un lloc aliè al servei TDX ni al Dipòsit Digital de la UB. No s'autoritza la presentació del seu contingut en una finestra o marc aliè a TDX o al Dipòsit Digital de la UB (framing). Aquesta reserva de drets afecta tant al resum de presentació de la tesi com als seus continguts. En la utilització o cita de parts de la tesi és obligat indicar el nom de la persona autora.

ADVERTENCIA. La consulta de esta tesis queda condicionada a la aceptación de las siguientes condiciones de uso: La difusión de esta tesis por medio del servicio TDR (www.tdx.cat) y a través del Repositorio Digital de la UB (deposit.ub.edu) ha sido autorizada por los titulares de los derechos de propiedad intelectual únicamente para usos privados enmarcados en actividades de investigación y docencia. No se autoriza su reproducción con finalidades de lucro ni su difusión y puesta a disposición desde un sitio ajeno al servicio TDR o al Repositorio Digital de la UB. No se autoriza la presentación de su contenido en una ventana o marco ajeno a TDR o al Repositorio Digital de la UB (framing). Esta reserva de derechos afecta tanto al resumen de presentación de la tesis como a sus contenidos. En la utilización o cita de partes de la tesis es obligado indicar el nombre de la persona autora.

WARNING. On having consulted this thesis you're accepting the following use conditions: Spreading this thesis by the TDX (www.tdx.cat) service and by the UB Digital Repository (deposit.ub.edu) has been authorized by the titular of the intellectual property rights only for private uses placed in investigation and teaching activities. Reproduction with lucrative aims is not authorized nor its spreading and availability from a site foreign to the TDX service or to the UB Digital Repository. Introducing its content in a window or frame foreign to the TDX service or to the UB Digital Repository is not authorized (framing). Those rights affect to the presentation summary of the thesis as well as to its contents. In the using or citation of parts of the thesis it's obliged to indicate the name of the author.

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL0001 | - | Hypothetical Protein SL0001 | -1,05 | 1,11 | 1,67 |
| SL0002 | <i>thrA</i> | Bifunctional aspartokinase/homoserine dehydrogenase 1 | 1,70 | 1,02 | 2,42 |
| SL0003 | <i>thrB</i> | Homoserine kinase | 1,23 | -1,09 | 1,15 |
| SL0004 | <i>thrC</i> | Threonine synthase | 1,13 | -1,11 | -1,03 |
| SL0005 | <i>yaaA</i> | UPF0246 protein yaaA | 1,04 | 1,17 | -2,22 |
| SL0006 | <i>yaaJ</i> | Uncharacterized transporter yaaJ | 1,24 | 1,13 | 1,12 |
| SL0007 | <i>tal1</i> | Transaldolase 1 | 1,02 | -1,18 | 1,34 |
| SL0008 | <i>mog</i> | Molybdopterin adenyllyltransferase | 1,33 | 1,02 | 2,27 |
| SL0009 | <i>yaaH</i> | Inner membrane protein yaaH | 1,31 | 1,08 | -1,16 |
| SL0010 | <i>yaaW</i> | UPF0174 protein yaaW | -1,14 | 1,06 | 1,09 |
| SL0011 | <i>yaal</i> | UPF0412 protein yaal | 1,23 | 1,10 | -1,14 |
| SL0012 | <i>dnaK</i> | Chaperone protein dnaK | 1,05 | 1,13 | 2,97 |
| SL0013 | <i>dnaJ</i> | Chaperone protein dnaJ | -1,06 | -1,09 | 2,03 |
| SL0014 | <i>ybdO</i> | Uncharacterized HTH-type transcriptional regulator ybdO | 1,05 | 1,18 | -1,02 |
| SL0015 | - | Hypothetical | -1,05 | -1,02 | 1,02 |
| SL0016 | - | Hypothetical | 1,02 | -1,34 | 1,50 |
| SL0017 | <i>yqeI</i> | Hypothetical | -1,11 | -1,07 | 1,13 |
| SL0018 | <i>chiA</i> | Chitinase A | 1,18 | -1,04 | 1,36 |
| SL0019 | - | Hypothetical | 1,33 | -1,10 | 1,64 |
| SL0020 | <i>yaiV</i> | Uncharacterized protein yaiV | 1,26 | -1,33 | -1,50 |
| SL0021 | <i>pilC</i> | Type-1 fimbrial protein, C chain | 1,31 | 1,02 | 1,10 |
| SL0022 | <i>fimC</i> | Chaperone protein fimC | 1,26 | 1,03 | -1,03 |
| SL0023 | <i>ycbS</i> | Uncharacterized outer membrane usher protein ycbS | 1,35 | -1,10 | 1,59 |
| SL0024 | <i>fimH</i> | Protein fimH | 1,16 | -1,11 | 1,18 |
| SL0025 | <i>ycbU</i> | Uncharacterized fimbrial-like protein ycbU | 1,46 | 1,48 | -1,04 |
| SL0026 | <i>fimF</i> | Protein fimF | 1,16 | -1,21 | 1,31 |
| SL0027 | <i>ycbF</i> | Uncharacterized fimbrial chaperone ycbF | 1,08 | -1,30 | 1,22 |
| SL0028 | - | DSBA Oxidoreductase | 1,20 | -1,05 | 1,17 |
| SL0029 | - | Hypothetical | 1,76 | 1,14 | 1,13 |
| SL0030 | <i>yqeI</i> | Hypothetical | 1,26 | -1,05 | -1,09 |
| SL0031 | <i>leuO</i> | Probable HTH-type transcriptional regulator leuO | -1,07 | -1,03 | 1,27 |
| SL0032 | - | Hypothetical | -1,01 | -1,02 | 1,21 |
| SL0033 | - | Arylsulfotransferase | -1,11 | 1,21 | -1,02 |
| SL0034 | <i>yhcR</i> | Endonuclease yhcR | 1,37 | 1,25 | 2,40 |
| SL0035 | <i>yfeN</i> | Uncharacterized protein yfeN | 1,20 | 1,08 | 1,20 |
| SL0036 | <i>betC</i> | Choline-sulfatase | -1,04 | -1,01 | 3,95 |
| SL0037 | <i>aslB</i> | Anaerobic sulfatase-maturing enzyme homolog AslB | -1,23 | 1,05 | 1,34 |
| SL0038 | - | Hypothetical | 1,10 | 1,18 | 1,54 |
| SL0039 | - | Arylsulfate Sulfotransferase | 1,19 | 1,06 | 1,12 |
| SL0040 | <i>nhaA</i> | Na(+)/H(+) antiporter nhaA | -1,22 | -1,40 | -1,05 |
| SL0041 | <i>nhaR</i> | Transcriptional activator protein nhaR | -1,05 | -1,34 | -1,06 |
| SL0042 | <i>yicl</i> | Uncharacterized family 31 glucosidase ORF2 | 1,21 | 1,14 | 2,73 |
| SL0043 | <i>xylP</i> | Putative xylose-proton symporter | 1,11 | -1,37 | 7,93 |
| SL0044 | <i>rpsT</i> | 30S ribosomal protein S20 | -1,21 | 1,09 | -3,04 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL0045 | <i>yaaY</i> | Uncharacterized protein <i>yaaY</i> | 1,11 | -1,33 | -1,13 |
| SL0046 | <i>ribF</i> | Riboflavin biosynthesis protein <i>ribF</i> | 1,03 | -1,03 | -1,66 |
| SL0047 | <i>ileS</i> | Isoleucyl-tRNA synthetase | 1,03 | -1,25 | 1,37 |
| SL0048 | <i>ispA</i> | Lipoprotein signal peptidase | 1,19 | -1,11 | 1,55 |
| SL0049 | <i>fkpB</i> | FKBP-type 16 kDa peptidyl-prolyl cis-trans isomerase | 1,08 | -1,04 | 1,25 |
| SL0050 | <i>ispH</i> | 4-hydroxy-3-methylbut-2-enyl diphosphate reductase | 1,21 | 1,24 | 1,10 |
| SL0051 | - | Hypothetical | 1,06 | -1,01 | 1,03 |
| SL0052 | <i>rihC</i> | Non-specific ribonucleoside hydrolase <i>rihC</i> | 1,40 | 1,26 | 3,12 |
| SL0053 | <i>citB</i> | Transcriptional regulatory protein <i>CitB</i> | 1,01 | 1,07 | 1,46 |
| SL0054 | <i>citA</i> | Sensor histidine kinase <i>CitA</i> | -1,01 | 1,15 | 1,46 |
| SL0055 | <i>oadB1</i> | Oxaloacetate decarboxylase beta chain 1 | 1,32 | 1,13 | 2,23 |
| SL0056 | <i>oadA</i> | Oxaloacetate decarboxylase alpha chain | 1,21 | -1,06 | 2,57 |
| SL0057 | <i>oadG1</i> | Probable oxaloacetate decarboxylase gamma chain | 1,12 | -1,07 | 4,14 |
| SL0058 | <i>citS</i> | Citrate-sodium symporter | -1,32 | -1,22 | 3,02 |
| SL0059 | <i>citC</i> | [Citrate [pro-3S]-lyase] ligase | -1,20 | -1,15 | 1,87 |
| SL0060 | <i>citD2</i> | Citrate lyase acyl carrier protein 2 | -1,07 | -1,12 | 1,73 |
| SL0061 | <i>citE</i> | Citrate lyase subunit beta | 1,11 | 1,07 | 7,85 |
| SL0062 | <i>citF</i> | Citrate lyase alpha chain | 1,37 | 1,12 | 5,71 |
| SL0063 | <i>citX</i> | Apo-citrate lyase phosphoribosyl-dephospho-CoA | 1,02 | -1,24 | 2,72 |
| SL0064 | <i>citG1</i> | Probable 2-(5"-triphosphoribosyl)-3'-dephosphoc | 1,12 | 1,15 | 2,58 |
| SL0065 | <i>dapB</i> | Dihydridopicolinate reductase | -1,24 | 1,02 | -1,36 |
| SL0066 | - | Hypothetical | 1,03 | -1,28 | -4,48 |
| SL0067 | <i>carA</i> | Carbamoyl-phosphate synthase small chain | -1,14 | 1,07 | -1,37 |
| SL0068 | <i>carB</i> | Carbamoyl-phosphate synthase large chain | 1,02 | 1,13 | 2,03 |
| SL0069 | <i>caiF</i> | Transcriptional activatory protein <i>caiF</i> | 1,67 | 1,77 | -1,26 |
| SL0070 | <i>caiE</i> | Carnitine operon protein <i>caiE</i> | 1,75 | 1,12 | 1,38 |
| SL0071 | <i>caiD</i> | Carnitinyl-CoA dehydratase | 1,28 | -1,04 | 2,23 |
| SL0072 | <i>caiC</i> | Probable crotonobetaine/carnitine-CoA ligase | 1,28 | 1,02 | -1,10 |
| SL0073 | <i>caiB</i> | Crotonobetainyl-CoA:carnitine CoA-transferase | 1,39 | -1,05 | 1,15 |
| SL0074 | <i>caiA</i> | Crotonobetainyl-CoA dehydrogenase | 1,51 | -1,22 | 1,33 |
| SL0075 | <i>caiT</i> | L-carnitine/gamma-butyrobetaine antiporter | 1,15 | -1,03 | 1,83 |
| SL0076 | <i>fixA</i> | Protein <i>fixA</i> | 1,10 | -1,07 | 1,64 |
| SL0077 | <i>fixB</i> | Protein <i>fixB</i> | 1,38 | 1,19 | 1,73 |
| SL0078 | <i>fixC</i> | Protein <i>fixC</i> | 1,35 | 1,10 | 1,71 |
| SL0079 | <i>fixX</i> | Ferredoxin-like protein <i>fixX</i> | 1,50 | -1,01 | 1,39 |
| SL0080 | <i>yaaU</i> | Putative metabolite transport protein <i>yaaU</i> | -1,00 | 1,00 | -1,06 |
| SL0081 | <i>ygdl</i> | Uncharacterized lipoprotein <i>ygdl</i> | -1,38 | 1,04 | -2,13 |
| SL0082 | - | Hypothetical | -1,34 | 1,37 | -1,88 |
| SL0083 | <i>yhcN</i> | Hypothetical | -1,00 | -1,12 | 1,61 |
| SL0084 | <i>yidJ</i> | Sulfatase | -1,07 | 1,03 | 1,35 |
| SL0085 | <i>caiD</i> | Hypothetical Protein <i>caiD</i> | 1,44 | 1,28 | 1,84 |
| SL0086 | <i>kefF</i> | Glutathione-regulated potassium-efflux system ancillary protein <i>kefF</i> | 1,02 | -1,23 | -1,15 |
| SL0087 | <i>kefC</i> | Glutathione-regulated potassium-efflux system protein <i>kefC</i> | 1,10 | 1,22 | 1,62 |
| SL0088 | <i>folA</i> | Dihydrofolate reductase | -1,03 | 1,00 | -1,63 |
| SL0089 | <i>apaH</i> | Bis(5'-nucleosyl)-tetraphosphatase, symmetrical | 1,15 | -1,16 | 1,04 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-----------------------|-----------------------|---------------------------|
| SL0090 | <i>apaG</i> | Protein ApaG | 1,04 | -1,15 | -1,16 |
| SL0091 | <i>rsmA</i> | Ribosomal RNA small subunit methyltransferase A | -1,04 | -1,11 | -1,61 |
| SL0092 | <i>pdxA1</i> | 4-hydroxythreonine-4-phosphate dehydrogenase 1 | 1,04 | -1,17 | -1,52 |
| SL0093 | <i>surA</i> | Chaperone surA | 1,07 | -1,07 | -1,17 |
| SL0094 | <i>lptD</i> | LPS-assembly protein lptD | -1,06 | -1,07 | -1,25 |
| SL0095 | <i>djIA</i> | DnaJ-like protein djIA | -1,08 | -1,10 | -1,89 |
| SL0096 | <i>rluA</i> | Ribosomal large subunit pseudouridine synthase A | 2,03 | 1,02 | 2,39 |
| SL0097 | <i>rapA</i> | RNA polymerase-associated protein rapA | 1,91 | -1,10 | 1,74 |
| SL0098 | <i>polB</i> | DNA polymerase II | -1,01 | -1,09 | -1,17 |
| SL0099 | <i>ygiQ</i> | Hypothetical | 1,26 | 1,05 | -1,46 |
| SL0100 | - | Hypothetical | 1,09 | 1,08 | -1,24 |
| SL0101 | <i>araD</i> | L-ribulose-5-phosphate 4-epimerase | 1,06 | -1,14 | 1,65 |
| SL0102 | <i>araA</i> | L-arabinose isomerase | 1,07 | -1,06 | 2,50 |
| SL0103 | <i>araB</i> | Ribulokinase | 1,02 | -1,03 | 3,31 |
| SL0104 | <i>araC</i> | Arabinose operon regulatory protein | 1,10 | -1,07 | 10,58 |
| SL0105 | <i>yabl</i> | Inner membrane protein yabl | 1,06 | 1,01 | -1,17 |
| SL0106 | <i>thiQ</i> | Thiamine import ATP-binding protein ThiQ | 1,10 | -1,16 | 1,19 |
| SL0107 | <i>thiP</i> | Thiamine transport system permease protein thiP | -1,01 | -1,07 | 1,13 |
| SL0108 | - | Hypothetical Protein SL0108 | -1,08 | -1,05 | -1,49 |
| SL0109 | <i>sgrR</i> | HTH-type transcriptional regulator sgrR | 1,10 | 1,09 | 1,28 |
| SL0110 | <i>leuD1</i> | 3-isopropylmalate dehydratase small subunit 1 | 1,18 | -1,08 | 2,28 |
| SL0111 | <i>leuC1</i> | 3-isopropylmalate dehydratase large subunit 1 | 1,24 | 1,05 | 3,98 |
| SL0112 | <i>leuB</i> | 3-isopropylmalate dehydrogenase | 1,21 | -1,08 | 3,10 |
| SL0113 | <i>leuA</i> | 2-isopropylmalate synthase | 1,12 | 1,12 | 1,81 |
| SL0114 | <i>leuL</i> | Hypothetical Protein leuL | 1,02 | 1,37 | 1,14 |
| SL0115 | <i>leuO</i> | Probable HTH-type transcriptional regulator leuO | -1,27 | 1,23 | -2,01 |
| SL0116 | <i>ilvI</i> | Acetolactate synthase isozyme 3 large subunit | 1,01 | -1,24 | 1,66 |
| SL0117 | <i>ilvH</i> | Acetolactate synthase isozyme 3 small subunit | -1,16 | -1,05 | 1,43 |
| SL0118 | <i>fruR</i> | Fructose repressor | -1,13 | -1,01 | -1,58 |
| SL0119 | <i>mraZ</i> | Protein mraZ | 1,12 | 1,13 | -1,72 |
| SL0120 | <i>rsmH</i> | Ribosomal RNA small subunit methyltransferase H | 1,04 | 1,01 | -1,83 |
| SL0121 | <i>ftsL</i> | Cell division protein ftsL | 1,06 | 1,04 | -1,34 |
| SL0122 | <i>ftsI</i> | Peptidoglycan synthase ftsI | 1,07 | 1,04 | -1,35 |
| SL0123 | <i>murE</i> | UDP-N-acetyl muramoyl-L-alanyl-D-glutamate--2,6-diaminopimelate ligase | 1,20 | -1,07 | -1,61 |
| SL0124 | <i>murF</i> | UDP-N-acetyl muramoyl-tripeptide--D-alanyl-D-alanine ligase | 1,20 | 1,07 | -1,46 |
| SL0125 | <i>mraY</i> | Phospho-N-acetyl muramoyl-pentapeptide-transferase | 1,12 | -1,09 | -1,81 |
| SL0126 | <i>murD</i> | UDP-N-acetyl muramoylalanine--D-glutamate ligase | 1,14 | 1,06 | -1,26 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL0127 | <i>ftsW</i> | Cell division protein ftsW | 1,16 | 1,07 | -1,50 |
| SL0128 | <i>murG</i> | UDP-N-acetylglucosamine--N-acetylmuramyl-(pentapeptide) pyrophosphoryl-undecaprenol N-acetylglucosamine transferase | 1,09 | -1,07 | -1,48 |
| SL0129 | <i>murC</i> | UDP-N-acetylmuramate--L-alanine ligase | 1,10 | 1,01 | -1,58 |
| SL0130 | <i>ddIB</i> | D-alanine--D-alanine ligase B | -1,16 | -1,06 | -1,48 |
| SL0131 | <i>ftsQ</i> | Cell division protein ftsQ | 1,06 | 1,03 | -1,32 |
| SL0132 | <i>ftsA</i> | Cell division protein ftsA | 1,02 | -1,03 | -1,78 |
| SL0133 | <i>ftsZ</i> | Cell division protein ftsZ | -1,00 | 1,08 | 1,03 |
| SL0134 | <i>lpxC</i> | UDP-3-O-[3-hydroxymyristoyl] N-acetylglucosamine deacetylase | -1,08 | 1,11 | -1,84 |
| SL0135 | <i>secM</i> | Secretion monitor | 1,29 | 1,10 | 1,09 |
| SL0136 | <i>secA</i> | Protein translocase subunit secA | 1,45 | 1,05 | 1,93 |
| SL0137 | <i>mutT</i> | Mutator mutT protein | 1,11 | -1,08 | 1,20 |
| SL0138 | <i>yacG</i> | UPF0243 zinc-binding protein yacG | -1,09 | -1,01 | 1,04 |
| SL0139 | <i>yacF</i> | UPF0289 protein CKO_03274 | -1,28 | -1,14 | -1,49 |
| SL0140 | <i>coaE</i> | Dephospho-CoA kinase | -1,16 | 1,05 | -1,78 |
| SL0141 | <i>guaC</i> | GMP reductase | 1,37 | -1,09 | 1,22 |
| SL0142 | <i>hofC</i> | Protein transport protein hofC | 1,16 | 1,15 | 1,01 |
| SL0143 | <i>hofB</i> | Protein transport protein hofB | -1,00 | -1,08 | 2,18 |
| SL0144 | <i>ppdD</i> | Prephilin peptidase-dependent protein D | -1,04 | 1,06 | 2,04 |
| SL0145 | <i>nadC</i> | Nicotinate-nucleotide pyrophosphorylase [carboxylating] | 1,00 | -1,08 | -1,77 |
| SL0146 | <i>ampD</i> | 1,6-anhydro-N-acetylmuramyl-L-alanine amidase AmpD | -1,00 | 1,15 | 1,20 |
| SL0147 | <i>ampE</i> | Protein AmpE | -1,10 | 1,09 | 1,08 |
| SL0148 | - | Alpha-N-arabinofuranosidase 2 | 1,03 | 1,19 | 1,43 |
| SL0149 | <i>yicJ</i> | Inner membrane symporter yicJ | 1,11 | 1,08 | 1,53 |
| SL0150 | <i>aroP</i> | Aromatic amino acid transport protein AroP | 1,04 | -1,07 | 2,45 |
| SL0151 | <i>pdhR</i> | Pyruvate dehydrogenase complex repressor | -1,06 | -1,15 | -2,74 |
| SL0152 | <i>aceE</i> | Pyruvate dehydrogenase E1 component | 1,00 | -1,19 | 1,91 |
| SL0153 | <i>aceF</i> | Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex | 1,13 | -1,02 | 3,97 |
| SL0154 | <i>lpdA</i> | Dihydrolipoyl dehydrogenase | 1,13 | -1,04 | 2,79 |
| SL0155 | - | Hypothetical | 1,09 | 1,62 | -1,11 |
| SL0156 | - | Hypothetical | -1,01 | -1,32 | 1,22 |
| SL0157 | <i>yacH</i> | Uncharacterized protein yacH | 1,01 | -1,02 | -1,36 |
| SL0158 | <i>yacH</i> | Uncharacterized protein yacH | -1,14 | 1,22 | -1,27 |
| SL0159 | <i>acnB</i> | Aconitate hydratase 2 | 1,07 | -1,21 | 3,83 |
| SL0160 | - | Restriction Endonuclease | -1,11 | -1,47 | -2,18 |
| SL0161 | <i>yacL</i> | UPF0231 protein yacL | 1,28 | 1,31 | 2,93 |
| SL0162 | <i>kdgT1</i> | 2-keto-3-deoxygluconate permease 1 | 1,26 | 1,09 | 2,83 |
| SL0163 | <i>ygbK</i> | Uncharacterized protein HI_1011 | 1,23 | -1,06 | 4,11 |
| SL0164 | <i>pdxA2</i> | 4-hydroxythreonine-4-phosphate dehydrogenase 2 | 1,36 | 1,07 | 2,76 |
| SL0165 | <i>ygbI</i> | Uncharacterized HTH-type transcriptional regulator ygbI | 1,10 | -1,06 | 1,50 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-------------------|-------------------|-----------------------|
| SL0166 | <i>speD</i> | S-adenosylmethionine decarboxylase proenzyme | -1,06 | -1,33 | -1,19 |
| SL0167 | <i>speE</i> | Spermidine synthase | -1,05 | -1,18 | -1,09 |
| SL0168 | <i>yacC</i> | Uncharacterized protein yacC | 1,12 | 1,01 | -1,74 |
| SL0169 | <i>cueO</i> | Blue copper oxidase cueO | 1,02 | -1,05 | 1,19 |
| SL0170 | <i>gcd</i> | Quinoprotein glucose dehydrogenase | -1,22 | -1,09 | 1,72 |
| SL0171 | <i>hpt</i> | Hypoxanthine phosphoribosyltransferase | -1,02 | 1,03 | -1,94 |
| SL0172 | <i>can</i> | Carbonic anhydrase 2 | -1,06 | -1,07 | -1,38 |
| SL0173 | <i>yadG</i> | Uncharacterized ABC transporter ATP-binding protein yadG | 1,04 | -1,19 | -1,05 |
| SL0174 | <i>yadH</i> | Inner membrane transport permease yadH | 1,04 | -1,17 | 1,19 |
| SL0175 | <i>lpfD</i> | Protein lpfD | 1,32 | 1,03 | 1,20 |
| SL0176 | <i>lpfC</i> | Outer membrane usher protein lpfC | -1,08 | -1,29 | 1,24 |
| SL0177 | <i>myfB</i> | Chaperone protein myfB | 1,09 | 1,02 | -1,21 |
| SL0178 | <i>fimF</i> | Fimbrial subunit type 1 | 1,05 | -1,03 | 3,27 |
| SL0179 | <i>yadI</i> | Putative phosphotransferase enzyme IIA component yadI | 1,54 | 1,63 | 1,28 |
| SL0180 | <i>yadE</i> | Uncharacterized protein yadE | -1,14 | 1,11 | -2,44 |
| SL0181 | <i>panD</i> | Aspartate 1-decarboxylase | 1,07 | -1,12 | -1,18 |
| SL0182 | <i>panC</i> | Pantothenate synthetase | -1,10 | -1,29 | -1,52 |
| SL0183 | <i>panB</i> | 3-methyl-2-oxobutanoate hydroxymethyltransferase 2-amino-4-hydroxy-6- | 1,18 | 1,27 | -1,33 |
| SL0184 | <i>folK</i> | hydroxymethyldihydropteridine pyrophosphokinase | 1,08 | 1,01 | -1,45 |
| SL0185 | <i>pcnB</i> | Poly(A) polymerase | -1,08 | -1,04 | -2,92 |
| SL0186 | <i>gluQ</i> | Glutamyl-Q tRNA(Asp) synthetase | -1,27 | -1,04 | -3,74 |
| SL0187 | <i>dksA</i> | DnaK suppressor protein | -1,08 | 1,05 | 1,21 |
| SL0188 | <i>sfsA</i> | Sugar fermentation stimulation protein A | -1,01 | -1,18 | 1,04 |
| SL0189 | <i>ligT</i> | 2'-5'-RNA ligase | 1,01 | -1,29 | 1,17 |
| SL0190 | <i>hrpB</i> | ATP-dependent RNA helicase hrpB | 1,08 | -1,05 | 1,07 |
| SL0191 | <i>mrcB</i> | Penicillin-binding protein 1B | 1,13 | 1,15 | 1,29 |
| SL0192 | <i>fhuA</i> | Ferrichrome-iron receptor | -1,04 | 1,41 | -2,51 |
| SL0193 | <i>fhuC</i> | Iron(3+)-hydroxamate import ATP-binding protein fhuC | -1,01 | 1,45 | -1,42 |
| SL0194 | <i>fhuD</i> | Iron(3+)-hydroxamate-binding protein fhuD | 1,23 | 1,59 | -1,73 |
| SL0195 | <i>fhuB</i> | Iron(3+)-hydroxamate import system permease protein fhuB | -1,06 | -1,19 | -1,15 |
| SL0196 | <i>smfA</i> | Fimbria A protein | 1,28 | -1,06 | 3,38 |
| SL0197 | <i>yfcU</i> | Putative outer membrane usher protein yfcU | -1,10 | -1,05 | -1,11 |
| SL0198 | <i>yfcS</i> | Uncharacterized fimbrial chaperone yfcS | 1,18 | -1,13 | 1,31 |
| SL0199 | <i>yfcR</i> | Uncharacterized protein yfcR | 1,14 | 1,01 | 1,30 |
| SL0200 | <i>yfcQ</i> | Uncharacterized fimbrial-like protein yfcQ | 1,21 | -1,13 | -1,04 |
| SL0201 | <i>yfcP</i> | Uncharacterized fimbrial-like protein yfcP | 1,04 | -1,15 | 1,16 |
| SL0202 | <i>yadU</i> | Uncharacterized protein yadU | 1,40 | 1,16 | 1,28 |
| SL0203 | <i>hemL</i> | Glutamate-1-semialdehyde 2,1-aminomutase | 1,17 | 1,05 | 1,39 |
| SL0204 | <i>clicA</i> | H(+)/Cl(-) exchange transporter clicA | 1,08 | -1,01 | -1,60 |
| SL0205 | <i>erpA</i> | Iron-sulfur cluster insertion protein erpA | -1,03 | 1,00 | -1,55 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>greA</i> vs | <i>greB</i> vs | <i>greAgreB</i> |
|--------|-------------|--|----------------|----------------|-----------------|
| | | | WT | WT | vs WT |
| SL0206 | <i>yadS</i> | UPF0126 inner membrane protein yadS | 1,19 | 1,16 | -1,37 |
| SL0207 | <i>btuF</i> | Vitamin B12-binding protein | -1,10 | -1,42 | -1,54 |
| SL0208 | <i>mtnN</i> | 5'-methylthioadenosine/S-adenosylhomocysteine nucleosidase | 1,10 | -1,12 | 1,08 |
| SL0209 | <i>dgt</i> | Deoxyguanosinetriphosphate triphosphohydrolase | -1,16 | -1,07 | 1,22 |
| SL0210 | <i>degP</i> | Protease do | -1,15 | -1,21 | 1,54 |
| SL0211 | <i>cdaR</i> | Carbohydrate diacid regulator | -1,03 | -1,04 | 4,32 |
| SL0212 | <i>yaeH</i> | UPF0325 protein ESA_03178 | -1,12 | -1,14 | 3,29 |
| SL0213 | <i>shiA</i> | Shikimate transporter | -1,19 | 1,05 | -2,38 |
| SL0214 | <i>dapD</i> | 2,3,4,5-tetrahydropyridine-2,6-dicarboxylate N-succinyltransferase | -1,01 | -1,12 | 1,20 |
| SL0215 | <i>glnD</i> | [Protein-PII] uridylyltransferase | 1,12 | 1,03 | 1,33 |
| SL0216 | <i>map</i> | Methionine aminopeptidase | 1,05 | -1,16 | -1,26 |
| SL0217 | <i>rpsB</i> | 30S ribosomal protein S2 | -1,12 | -1,08 | -1,19 |
| SL0218 | <i>tsf</i> | Elongation factor Ts | 1,05 | -1,10 | 1,18 |
| SL0219 | <i>pyrH</i> | Uridylate kinase | 1,14 | -1,16 | -1,05 |
| SL0220 | <i>frr</i> | Ribosome-recycling factor | 1,02 | -1,11 | -1,14 |
| SL0221 | <i>dxr</i> | 1-deoxy-D-xylulose 5-phosphate reductoisomerase | -1,00 | -1,05 | -2,21 |
| SL0222 | <i>uppS</i> | Undecaprenyl pyrophosphate synthase | -1,06 | 1,22 | -2,18 |
| SL0223 | <i>cdsA</i> | Phosphatidate cytidylyltransferase | 1,14 | 1,07 | -1,82 |
| SL0224 | <i>rseP</i> | Regulator of sigma E protease | -1,00 | -1,06 | -1,72 |
| SL0225 | <i>yaeT</i> | Outer membrane protein assembly factor yaeT | 1,03 | -1,07 | 1,15 |
| SL0226 | <i>skp</i> | Chaperone protein skp | -1,09 | -1,29 | -1,08 |
| SL0227 | <i>lpdD</i> | UDP-3-O-[3-hydroxymyristoyl] glucosamine N-acyltransferase | -1,12 | -1,32 | -1,68 |
| SL0228 | <i>fabZ</i> | (3R)-hydroxymyristoyl-[acyl-carrier-protein] dehydratase | -1,07 | -1,06 | -1,63 |
| SL0229 | <i>lpdA</i> | Acyl-[acyl-carrier-protein]--UDP-N-acetylglucosamine O-acyltransferase | -1,00 | -1,12 | -1,40 |
| SL0230 | <i>lpdB</i> | Lipid-A-disaccharide synthase | 1,05 | -1,20 | -1,51 |
| SL0231 | <i>rnhB</i> | Ribonuclease HII | 1,22 | -1,26 | -1,17 |
| SL0232 | <i>dnaE</i> | DNA polymerase III subunit alpha | 1,23 | -1,04 | 1,30 |
| SL0233 | <i>accA</i> | Acetyl-coenzyme A carboxylase carboxyl transferase subunit alpha | 1,03 | -1,02 | -1,03 |
| SL0234 | - | Chitinase | 1,07 | 1,01 | 1,25 |
| SL0235 | <i>ldcC</i> | Lysine decarboxylase, constitutive | 1,13 | 1,05 | 1,10 |
| SL0236 | <i>yaeR</i> | Uncharacterized protein yaeR | 1,09 | -1,02 | 1,59 |
| SL0237 | <i>tilS</i> | tRNA(Ile)-lysidine synthase | 1,08 | -1,02 | -1,07 |
| SL0238 | <i>rof</i> | Protein rof | 1,04 | 1,10 | 1,31 |
| SL0239 | <i>yaeP</i> | UPF0253 protein CKO_03176 | 1,09 | 1,29 | 1,59 |
| SL0240 | <i>yaeQ</i> | Uncharacterized protein yaeQ | -1,15 | -1,01 | -1,64 |
| SL0241 | <i>yaeJ</i> | Uncharacterized protein yaeJ | -1,22 | -1,07 | -1,74 |
| SL0242 | <i>nlpE</i> | Lipoprotein nlpE | 1,09 | 1,07 | -1,78 |
| SL0243 | <i>proS</i> | Prolyl-tRNA synthetase | -1,07 | -1,13 | -1,52 |
| SL0244 | <i>yaeB</i> | UPF0066 protein yaeB | 1,15 | 1,05 | -2,27 |
| SL0245 | <i>rcsF</i> | Protein rcsF | 1,00 | -1,08 | -1,52 |
| SL0246 | <i>metQ</i> | D-methionine-binding lipoprotein metQ | -1,02 | 1,01 | 1,49 |
| SL0247 | <i>metI</i> | D-methionine transport system permease protein metI | -1,07 | -1,27 | -1,35 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-------------------|-------------------|-----------------------|
| SL0248 | <i>metN1</i> | Methionine import ATP-binding protein MetN 1 | 1,06 | -1,24 | -1,87 |
| SL0249 | <i>gmhB</i> | D,D-heptose 1,7-bisphosphate phosphatase | -1,03 | -1,16 | -1,31 |
| SL0250 | <i>dkgB</i> | 2,5-diketo-D-gluconic acid reductase B | 1,07 | -1,10 | 1,91 |
| SL0251 | <i>yafC</i> | Uncharacterized HTH-type transcriptional regulator yafC | 1,35 | 1,14 | 1,45 |
| SL0252 | <i>ytbD</i> | Uncharacterized MFS-type transporter ytbD | 1,11 | -1,14 | 1,37 |
| SL0253 | <i>yafD</i> | UPF0294 protein Ent638_0743 | 1,17 | -1,07 | 1,33 |
| SL0254 | <i>yafE</i> | Uncharacterized protein yafE | 1,18 | 1,01 | 1,09 |
| SL0255 | <i>mltD</i> | Membrane-bound lytic murein transglycosylase D | -1,61 | 1,08 | -6,32 |
| SL0256 | <i>gloB</i> | Hydroxyacylglutathione hydrolase | -1,07 | -1,23 | 1,42 |
| SL0257 | <i>yafS</i> | Uncharacterized protein yafS | 1,10 | -1,03 | 1,20 |
| SL0258 | <i>rnhA</i> | Ribonuclease H | 1,12 | 1,13 | -1,42 |
| SL0259 | <i>dnaQ</i> | DNA polymerase III subunit epsilon | 1,14 | 1,04 | 1,09 |
| SL0260 | - | Hypothetical | 1,24 | 1,06 | 1,05 |
| SL0261 | - | Hypothetical | 1,12 | 1,00 | 1,45 |
| SL0262 | - | Hypothetical | 1,09 | -1,00 | 1,24 |
| SL0263 | - | Hypothetical | 1,11 | -1,23 | 1,73 |
| SL0264 | - | Virulence Protein SciE Type | 1,06 | -1,17 | 1,86 |
| SL0265 | - | Cytoplasmic Protein | 1,19 | 1,05 | 2,97 |
| SL0266 | <i>clpB</i> | Chaperone protein clpB | 1,15 | -1,36 | 3,43 |
| SL0267 | - | Hypothetical | 1,22 | 1,04 | 3,82 |
| SL0268 | - | Hypothetical | 1,09 | -1,15 | 2,77 |
| SL0269 | - | Hypothetical Protein SL0269 | 1,14 | 1,01 | 1,44 |
| SL0270 | - | Cytoplasmic Protein | 1,11 | -1,00 | 1,02 |
| SL0271 | <i>hcp1</i> | Protein hcp1 | 1,14 | 1,07 | 1,85 |
| SL0272 | - | Cytoplasmic Protein | 1,22 | 1,24 | 1,18 |
| SL0273 | - | Hypothetical | 1,08 | 1,06 | 1,13 |
| SL0274 | <i>hcp1</i> | Protein hcp1 | 1,27 | -1,27 | -1,09 |
| SL0275 | - | Hypothetical | 1,34 | -1,06 | 1,02 |
| SL0276 | - | Hypothetical | 1,12 | -1,02 | 1,35 |
| SL0277 | <i>ytxE</i> | Uncharacterized 24.6 kDa protein in ccpA 3'region | 1,07 | 1,24 | 1,55 |
| SL0278 | - | Hypothetical | 1,62 | 1,42 | 1,64 |
| SL0279 | - | Hypothetical | 1,03 | 1,10 | 1,07 |
| SL0280 | - | Hypothetical | 1,27 | 1,04 | 1,88 |
| SL0281 | - | Cytoplasmic Protein | -1,09 | -1,24 | 1,64 |
| SL0282 | - | Hypothetical | 1,10 | -1,17 | 1,66 |
| SL0283 | - | Hypothetical | 1,05 | -1,05 | -1,11 |
| SL0284 | - | Hypothetical | 1,09 | -1,12 | 1,91 |
| SL0285 | - | Hypothetical | 1,13 | -1,20 | 1,10 |
| SL0286 | <i>rhsE</i> | Putative protein rhsE | -1,09 | -1,10 | -1,32 |
| SL0287 | <i>rhsE</i> | Putative protein rhsE | -1,02 | 1,22 | -1,18 |
| SL0288 | - | Cytoplasmic Protein | 1,12 | 1,14 | 1,52 |
| SL0289 | - | Phosphotriesterase | -1,00 | -1,05 | 1,02 |
| SL0290 | <i>yjiW</i> | Hypothetical | 1,12 | 1,09 | -1,13 |
| SL0291 | - | Cytoplasmic Protein | 1,14 | 1,47 | 1,14 |
| SL0292 | - | Hypothetical | 1,16 | 1,29 | -1,23 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-----------------------|-----------------------|---------------------------|
| SL0293 | - | Transposase | -1,05 | 1,26 | 1,05 |
| SL0294 | <i>yagA</i> | Insertion element IS407 uncharacterized 31.7 kDa protein | -1,11 | -1,00 | 1,10 |
| SL0295 | - | Lipoprotein | -1,08 | 1,22 | -1,63 |
| SL0296 | <i>aggD</i> | Chaperone protein AggD | 1,20 | 1,07 | -1,01 |
| SL0297 | <i>afaC</i> | Outer membrane usher protein AfaC | 1,23 | 1,04 | 1,18 |
| SL0298 | - | Invasin Protein AfaD | 1,15 | 1,07 | 1,14 |
| SL0299 | <i>yxkH</i> | Putative polysaccharide deacetylase yxkH | -1,28 | 1,01 | -1,48 |
| SL0300 | <i>sinR</i> | Probable HTH-type transcriptional regulator sinR | -1,68 | -1,43 | -2,91 |
| SL0301 | - | Hypothetical | -1,19 | 1,22 | -1,64 |
| SL0302 | - | Hypothetical | -1,47 | 1,23 | -1,26 |
| SL0303 | - | Hypothetical | -1,04 | 1,09 | 1,11 |
| SL0304 | <i>yafV</i> | UPF0012 hydrolase yafV | 1,05 | 1,10 | 1,98 |
| SL0305 | <i>fadE</i> | Acyl-coenzyme A dehydrogenase | -1,34 | 1,19 | 9,79 |
| SL0306 | <i>gmhA</i> | Phosphoheptose isomerase | 1,03 | -1,01 | 1,09 |
| SL0307 | <i>yafJ</i> | Putative glutamine amidotransferase yafJ | -1,01 | -1,18 | -1,10 |
| SL0308 | <i>yafK</i> | Putative L,D-transpeptidase YafK | 1,10 | 1,11 | -1,42 |
| SL0309 | <i>dinB</i> | DNA polymerase IV | 1,05 | 1,08 | 1,26 |
| SL0310 | <i>ykfJ</i> | Uncharacterized protein ykfJ | -1,37 | -1,03 | -2,01 |
| SL0311 | <i>prfH</i> | Putative peptide chain release factor homolog | -1,04 | -1,20 | -1,91 |
| SL0312 | <i>pepD</i> | Aminoacyl-histidine dipeptidase | 1,02 | -1,14 | 1,31 |
| SL0313 | <i>gpt</i> | Xanthine phosphoribosyltransferase | 1,09 | 1,06 | -2,59 |
| SL0314 | <i>frsA</i> | Esterase frsA | 1,13 | 1,20 | 1,61 |
| SL0315 | <i>crl</i> | Sigma factor-binding protein crl | 1,19 | 1,17 | 2,15 |
| SL0316 | <i>phoE</i> | Outer membrane pore protein E | 1,24 | 1,23 | 2,05 |
| SL0317 | <i>proB</i> | Glutamate 5-kinase | 1,01 | -1,26 | -1,42 |
| SL0318 | <i>proA</i> | Gamma-glutamyl phosphate reductase | 1,01 | -1,26 | 1,46 |
| SL0319 | <i>insF1</i> | Transposase insF for insertion sequence IS3A | 1,08 | -1,10 | 1,51 |
| SL0320 | - | Glycerol Dehydratase Reactivation Factor Large Subunit | -1,12 | -1,06 | -1,23 |
| SL0321 | - | Glycerol Dehydratase Reactivation Factor Large Subunit | 1,04 | 1,23 | -1,17 |
| SL0322 | <i>yoaC</i> | Uncharacterized protein yoaC | 1,20 | 1,21 | 1,81 |
| SL0323 | <i>ynfM</i> | Inner membrane transport protein ynfM | -1,19 | -1,26 | 1,29 |
| SL0324 | <i>leuC2</i> | 3-isopropylmalate dehydratase large subunit 2 | -1,12 | -1,33 | 1,41 |
| SL0325 | <i>leuD2</i> | 3-isopropylmalate dehydratase small subunit 2 | 1,18 | -1,21 | -1,07 |
| SL0326 | <i>yisK</i> | Uncharacterized protein yisK | 1,05 | -1,20 | -1,26 |
| SL0327 | <i>dehH1</i> | Haloacetate dehalogenase H-1 | 1,09 | 1,10 | 1,31 |
| SL0328 | <i>ttdR</i> | HTH-type transcriptional activator ttdR | 1,12 | 1,05 | 1,13 |
| SL0329 | - | Hypothetical | -1,38 | -1,10 | -1,74 |
| SL0330 | - | Hypothetical | 1,04 | 1,00 | 1,01 |
| SL0331 | <i>mrkB</i> | Chaperone protein mrkB | -1,13 | -1,06 | -1,12 |
| SL0332 | - | Hypothetical | 1,14 | -1,36 | 1,07 |
| SL0333 | <i>hifC</i> | Outer membrane usher protein hifC | 1,17 | 1,17 | -1,05 |
| SL0334 | <i>ecpD</i> | Chaperone protein ecpD | -1,46 | -1,32 | 1,18 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|---------------|--|-----------------------|-----------------------|---------------------------|
| SL0335 | <i>F17a-A</i> | F17 fimbrial protein | -1,02 | -1,06 | -1,02 |
| SL0336 | - | Transmembrane Regulator | -1,37 | -1,27 | -3,98 |
| SL0337 | - | Periplasmic Protein | -1,33 | -1,26 | -2,23 |
| SL0338 | <i>rtn</i> | Protein rtn | -1,13 | 1,01 | 1,11 |
| SL0339 | - | Transmembrane Regulator | -1,15 | 1,05 | 1,28 |
| SL0340 | - | Hypothetical | -1,15 | 1,07 | 1,19 |
| SL0341 | <i>ail</i> | Attachment invasion locus protein | -1,07 | -1,08 | -1,19 |
| SL0342 | - | Response Regulator | 1,13 | -1,09 | -1,38 |
| SL0343 | - | Hypothetical | 1,10 | -1,03 | -1,84 |
| SL0344 | <i>yjeI</i> | Uncharacterized protein yjeI | 1,27 | 1,26 | 3,73 |
| SL0345 | <i>oprM</i> | Outer membrane protein oprM | 1,10 | 1,09 | 1,52 |
| SL0346 | <i>bepE</i> | Efflux pump membrane transporter BepE | 1,15 | 1,05 | 1,76 |
| SL0347 | <i>mtrC</i> | Membrane fusion protein mtrC | -1,03 | -1,30 | 1,36 |
| SL0348 | <i>actP</i> | Copper-transporting P-type ATPase | 1,08 | -1,11 | 4,15 |
| SL0349 | <i>hmrR</i> | HTH-type transcriptional regulator hmrR | 1,16 | 1,30 | 2,01 |
| SL0350 | - | Conserved Hypothetical Protein | 1,36 | -1,02 | 2,36 |
| SL0351 | <i>yjhB</i> | Putative metabolite transport protein yjhB | -1,16 | -1,13 | 2,18 |
| SL0352 | <i>mod</i> | Type III restriction-modification system StyLT1 enzyme mod | -1,09 | -1,12 | 1,15 |
| SL0353 | <i>res</i> | Type III restriction-modification system StyLT1 enzyme res | 1,14 | 1,07 | 2,64 |
| SL0354 | - | Hypothetical | -1,09 | 1,27 | -1,59 |
| SL0355 | <i>cydA</i> | Cytochrome d ubiquinol oxidase subunit 1 | -1,09 | 1,10 | -1,82 |
| SL0356 | <i>appB</i> | Cytochrome bd-II oxidase subunit 2 | 1,10 | 1,07 | 1,19 |
| SL0357 | - | Hypothetical | 1,07 | 1,01 | 1,18 |
| SL0358 | <i>pchR</i> | Regulatory protein pchR | 1,16 | 1,19 | -1,61 |
| SL0359 | <i>foxA</i> | Ferrioxamine B receptor | 1,47 | 1,21 | -1,08 |
| SL0360 | <i>yahN</i> | Uncharacterized membrane protein yahN | 1,41 | 1,47 | 3,45 |
| SL0361 | <i>yahO</i> | Uncharacterized protein yahO | 1,05 | 1,13 | 1,93 |
| SL0362 | <i>prpR</i> | Propionate catabolism operon regulatory protein | 1,09 | -1,04 | 2,42 |
| SL0363 | <i>prpB</i> | Methylisocitrate lyase | 1,04 | 1,27 | 2,74 |
| SL0364 | <i>prpC</i> | 2-methylcitrate synthase | -1,05 | 1,08 | 5,33 |
| SL0365 | <i>prpD</i> | 2-methylcitrate dehydratase | 1,05 | -1,05 | 6,64 |
| SL0366 | <i>prpE</i> | Propionate--CoA ligase | 1,23 | -1,12 | 4,91 |
| SL0367 | <i>hemB</i> | Delta-aminolevulinic acid dehydratase | 1,11 | -1,02 | -1,15 |
| SL0368 | <i>yaiT</i> | Uncharacterized protein yaiT | -1,07 | 1,07 | -1,07 |
| SL0369 | <i>yaiV</i> | Uncharacterized protein yaiV | -1,01 | 1,14 | -1,73 |
| SL0370 | <i>ampH</i> | Penicillin-binding protein AmpH | 1,09 | -1,05 | -1,25 |
| SL0371 | <i>sbmA</i> | Protein sbmA | 1,23 | -1,04 | -2,98 |
| SL0372 | <i>yaiW</i> | Uncharacterized protein yaiW | 1,01 | 1,11 | -2,53 |
| SL0373 | <i>yaiY</i> | Inner membrane protein yaiY | 1,02 | 1,35 | -1,95 |
| SL0374 | <i>yaiZ</i> | Uncharacterized protein yaiZ | 1,39 | 1,18 | 2,44 |
| SL0375 | <i>ddlA</i> | D-alanine--D-alanine ligase A | 1,06 | -1,08 | -1,04 |
| SL0376 | - | Extensin Family Protein | 1,14 | 1,21 | 4,71 |
| SL0377 | <i>mdtG</i> | Multidrug resistance protein mdtG | 1,08 | -1,08 | -2,63 |
| SL0378 | <i>iraP</i> | Anti-adapter protein iraP | -1,20 | 1,30 | 1,32 |
| SL0379 | <i>psiF</i> | Phosphate starvation-inducible protein psiF | 1,16 | 1,43 | 1,81 |
| SL0380 | <i>adrA</i> | Protein AdrA | 1,05 | 1,02 | 1,03 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL0381 | <i>proC</i> | Pyroline-5-carboxylate reductase | 1,14 | 1,17 | 1,69 |
| SL0382 | <i>yail</i> | UPF0178 protein yail | -1,15 | -1,06 | -2,28 |
| SL0383 | <i>aroL</i> | Shikimate kinase 2 | 1,08 | 1,12 | -1,44 |
| SL0384 | <i>yaiA</i> | Uncharacterized protein yaiA | -1,02 | 1,05 | -1,36 |
| SL0385 | <i>aroM</i> | Protein AroM | -1,05 | 1,19 | 1,12 |
| SL0386 | <i>yaiE</i> | UPF0345 protein Ent638_0862 | 1,09 | 1,01 | 1,08 |
| SL0387 | <i>rdgC</i> | Recombination-associated protein rdgC | 1,02 | -1,04 | -2,81 |
| SL0388 | <i>mak</i> | Fructokinase | 1,01 | -1,11 | 1,43 |
| SL0389 | <i>araJ</i> | Protein AraJ | 1,21 | 1,06 | 1,25 |
| SL0390 | <i>sbcC</i> | Nuclease sbcCD subunit C | 1,35 | 1,20 | 1,54 |
| SL0391 | <i>sbcD</i> | Nuclease sbcCD subunit D | 1,16 | 1,08 | -2,20 |
| SL0392 | <i>phoB</i> | Phosphate regulon transcriptional regulatory protein phoB | 1,23 | 1,26 | -1,43 |
| SL0393 | <i>phoR</i> | Phosphate regulon sensor protein phoR | 1,52 | 1,35 | -1,14 |
| SL0394 | <i>brnQ</i> | Branched-chain amino acid transport system 2 carrier protein | 1,10 | 1,00 | -1,30 |
| SL0395 | <i>proY</i> | Proline-specific permease proY | 1,33 | 1,01 | -2,05 |
| SL0396 | <i>malZ</i> | Maltodextrin glucosidase | -1,28 | -1,40 | -1,05 |
| SL0397 | <i>ahpC</i> | Probable peroxiredoxin | -1,02 | 1,14 | -2,76 |
| SL0398 | <i>acpH</i> | Acyl carrier protein phosphodiesterase | 1,08 | 1,10 | -1,44 |
| SL0399 | <i>queA</i> | S-adenosylmethionine:tRNA ribosyltransferase-isomerase | -1,10 | 1,07 | -2,69 |
| SL0400 | <i>tgt</i> | Queuine tRNA-ribosyltransferase | -1,13 | -1,03 | -1,43 |
| SL0401 | <i>yajC</i> | UPF0092 membrane protein yajC | -1,08 | -1,11 | -1,06 |
| SL0402 | <i>secD</i> | Protein-export membrane protein secD | 1,00 | -1,17 | -1,54 |
| SL0403 | <i>secF</i> | Protein-export membrane protein secF | -1,00 | -1,24 | -1,07 |
| SL0404 | - | Glyoxalase/Bleomycin Resistance Protein/Dioxygenase | 1,08 | -1,03 | -1,12 |
| SL0405 | <i>yobV</i> | Uncharacterized HTH-type transcriptional regulator yobV | 1,22 | -1,21 | -1,56 |
| SL0406 | <i>yajD</i> | Uncharacterized protein yajD | -1,02 | 1,01 | -1,42 |
| SL0407 | <i>tsx</i> | Nucleoside-specific channel-forming protein tsx | -1,09 | -1,17 | 1,90 |
| SL0408 | <i>yajl</i> | Uncharacterized lipoprotein yajl | 1,03 | 1,19 | -1,41 |
| SL0409 | <i>nrdR</i> | Transcriptional repressor nrdR | 1,04 | -1,01 | 1,33 |
| SL0410 | <i>ribD</i> | Riboflavin biosynthesis protein ribD | -1,06 | 1,06 | -1,16 |
| SL0411 | <i>ribH</i> | 6,7-dimethyl-8-ribityllumazine synthase | 1,02 | 1,07 | 1,27 |
| SL0412 | <i>nusB</i> | N utilization substance protein B homolog | -1,01 | 1,15 | 1,45 |
| SL0413 | <i>thiL</i> | Thiamine-monophosphate kinase | -1,04 | -1,04 | -1,04 |
| SL0414 | <i>pgpA</i> | Phosphatidylglycerophosphatase A | 1,03 | -1,11 | -1,04 |
| SL0415 | <i>yajO</i> | Uncharacterized oxidoreductase yajO | 1,20 | 1,41 | 2,32 |
| SL0416 | <i>dxs</i> | 1-deoxy-D-xylulose-5-phosphate synthase | 1,19 | 1,11 | -1,64 |
| SL0417 | <i>ispA</i> | Geranyltransterase | 1,05 | -1,01 | -1,64 |
| SL0418 | <i>xseB</i> | Exodeoxyribonuclease 7 small subunit | 1,17 | 1,03 | -1,23 |
| SL0419 | <i>thil</i> | tRNA sulfurtransferase | 1,08 | -1,05 | -2,71 |
| SL0420 | <i>phnV</i> | Putative 2-aminoethylphosphonate transport system permease protein phnV | 1,01 | 1,17 | -1,09 |
| SL0421 | <i>phnU</i> | Putative 2-aminoethylphosphonate transport system permease protein phnU | 1,27 | 1,37 | 1,22 |
| SL0422 | <i>phnT</i> | Putative 2-aminoethylphosphonate import ATP-binding protein phnT | -1,02 | 1,13 | 1,21 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-------------------|-------------------|-----------------------|
| SL0423 | <i>phnS</i> | Putative 2-aminoethylphosphonate-binding periplasmic protein | 1,00 | 1,23 | -1,27 |
| SL0424 | <i>phnR</i> | Putative transcriptional regulator of 2-aminoethylphosphonate degradation operons | 1,09 | 1,02 | 1,25 |
| SL0425 | <i>phnW</i> | 2-aminoethylphosphonate--pyruvate transaminase | -1,15 | -1,04 | 1,07 |
| SL0426 | <i>phnX</i> | Phosphonoacetaldehyde hydrolase | 1,15 | -1,06 | -1,17 |
| SL0427 | <i>thiJ</i> | Protein thiJ | 1,07 | -1,02 | 1,28 |
| SL0428 | <i>panE</i> | 2-dehydropantoate 2-reductase | 1,27 | 1,27 | 1,67 |
| SL0429 | <i>yajQ</i> | UPF0234 protein CKO_02735 | 1,34 | 1,12 | 1,49 |
| SL0430 | <i>yajR</i> | Inner membrane transport protein yajR | -1,07 | 1,01 | -1,83 |
| SL0431 | <i>ybeT</i> | Hypothetical | -1,11 | -1,21 | 1,68 |
| SL0432 | <i>ybeT</i> | Hypothetical | -1,10 | -1,28 | 2,29 |
| SL0433 | <i>cyoE</i> | Protoheme IX farnesyltransferase | -1,12 | -1,50 | 11,62 |
| SL0434 | <i>cyoD</i> | Cytochrome o ubiquinol oxidase protein cyoD | -1,20 | -1,53 | 13,42 |
| SL0435 | <i>cyoC</i> | Cytochrome o ubiquinol oxidase subunit 3 | -1,10 | -1,60 | 13,28 |
| SL0436 | <i>cyoB</i> | Ubiquinol oxidase subunit 1 | -1,08 | -1,42 | 5,97 |
| SL0437 | <i>cyoA</i> | Ubiquinol oxidase subunit 2 | -1,09 | -1,17 | 6,05 |
| SL0438 | <i>ampG</i> | Protein AmpG | -1,13 | -1,39 | -1,37 |
| SL0439 | <i>yajG</i> | Uncharacterized lipoprotein yajG | -1,22 | -1,13 | -1,65 |
| SL0440 | <i>bolA</i> | Protein BolA | -1,15 | 1,16 | 1,95 |
| SL0441 | <i>tig</i> | Trigger factor | 1,03 | -1,11 | -1,20 |
| SL0442 | <i>clpP</i> | ATP-dependent Clp protease proteolytic subunit | -1,01 | -1,01 | 1,13 |
| SL0443 | <i>clpX</i> | ATP-dependent Clp protease ATP-binding subunit clpX | -1,02 | -1,04 | -1,38 |
| SL0444 | <i>lon</i> | Hypothetical Protein lon | 1,07 | 1,06 | 2,44 |
| SL0445 | <i>hupB</i> | DNA-binding protein HU-beta | 1,17 | 1,14 | 2,02 |
| SL0446 | <i>ppiD</i> | Peptidyl-prolyl cis-trans isomerase D | 1,20 | -1,11 | -1,27 |
| SL0447 | <i>ybaV</i> | Uncharacterized protein ybaV | 1,31 | 1,25 | 1,24 |
| SL0448 | <i>tesC</i> | Long-chain acyl-CoA thioesterase tesC | 1,24 | -1,05 | 1,33 |
| SL0449 | <i>queC</i> | 7-cyano-7-deazaguanine synthase | 1,00 | -1,01 | -2,53 |
| SL0450 | <i>ybaE</i> | Uncharacterized protein ybaE | 1,13 | 1,12 | 6,33 |
| SL0451 | <i>cof</i> | HMP-PP phosphatase | -1,09 | 1,04 | -1,13 |
| SL0452 | <i>cysM</i> | Cysteine synthase B | 1,19 | 1,11 | -1,12 |
| SL0453 | <i>ybaO</i> | Uncharacterized HTH-type transcriptional regulator ybaO | 1,04 | 1,01 | 1,02 |
| SL0454 | <i>mdlA</i> | Multidrug resistance-like ATP-binding protein mdlA | 1,13 | -1,01 | -1,09 |
| SL0455 | <i>mdlB</i> | Multidrug resistance-like ATP-binding protein mdlB | 1,12 | -1,04 | 1,28 |
| SL0456 | <i>glnK</i> | Nitrogen regulatory protein P-II 2 | 1,23 | -1,09 | -1,64 |
| SL0457 | <i>amtB</i> | Ammonia channel | 1,19 | 1,20 | 1,32 |
| SL0458 | <i>tesB</i> | Acyl-CoA thioesterase 2 | 1,05 | 1,01 | 1,37 |
| SL0459 | <i>ybaY</i> | Uncharacterized lipoprotein ybaY | -1,00 | 1,07 | -1,02 |
| SL0460 | <i>ybaZ</i> | Uncharacterized protein ybaZ | 1,09 | 1,16 | -1,82 |
| SL0461 | <i>ylaB</i> | Uncharacterized protein ylaB | 1,20 | 1,16 | -1,05 |
| SL0462 | <i>rpmE2</i> | 50S ribosomal protein L31 type B | 1,05 | 1,35 | 1,04 |
| SL0463 | <i>rpmJ</i> | 50S ribosomal protein L36 | 1,07 | 1,36 | 1,01 |
| SL0464 | <i>ylaC</i> | Inner membrane protein ylaC | 1,01 | 1,05 | -1,11 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-----------------------|-----------------------|---------------------------|
| SL0465 | <i>maa</i> | Maltose O-acetyltransferase | 1,14 | 1,06 | 1,16 |
| SL0466 | <i>hha</i> | Hemolysin expression-modulating protein | -1,00 | 1,03 | 1,39 |
| SL0467 | <i>ybaJ</i> | Uncharacterized protein ybaJ | -1,02 | 1,05 | 1,33 |
| SL0468 | <i>acrB</i> | Acriflavine resistance protein B | 1,30 | 1,12 | 1,43 |
| SL0469 | <i>acrA</i> | Acriflavine resistance protein A | 1,02 | -1,10 | -1,37 |
| SL0470 | <i>acrR</i> | HTH-type transcriptional regulator AcrR | 1,00 | 1,05 | -1,48 |
| SL0471 | <i>kefA</i> | Potassium efflux system KefA | 1,09 | 1,11 | -1,42 |
| SL0472 | <i>yhgA</i> | Uncharacterized protein pSLT051 | -1,04 | -1,19 | -1,11 |
| SL0473 | <i>ybaM</i> | Uncharacterized protein ybaM | 1,03 | -1,12 | 1,04 |
| SL0474 | <i>priC</i> | Primosomal replication protein N" | 1,04 | -1,08 | 1,21 |
| SL0475 | <i>ybaN</i> | Inner membrane protein ybaN | -1,06 | 1,22 | -1,78 |
| SL0476 | <i>apt</i> | Adenine phosphoribosyltransferase | 1,21 | 1,12 | -1,45 |
| SL0477 | <i>dnaX</i> | DNA polymerase III subunit tau | 1,04 | 1,09 | -1,73 |
| SL0478 | <i>ybaB</i> | UPF0133 protein KPK_4227 | 1,22 | -1,04 | -1,11 |
| SL0479 | <i>recR</i> | Recombination protein recR | 1,21 | 1,02 | -1,38 |
| SL0480 | <i>htpG</i> | Chaperone protein htpG | 1,08 | -1,04 | 3,68 |
| SL0481 | <i>adk</i> | Adenylate kinase | -1,06 | -1,07 | -1,85 |
| SL0482 | <i>hemH</i> | Ferrochelatase | 1,04 | -1,00 | -8,01 |
| SL0483 | <i>aes</i> | Acetyl esterase | 1,02 | 1,08 | -1,52 |
| SL0484 | <i>gsk</i> | Inosine-guanosine kinase | 1,01 | 1,00 | -2,02 |
| SL0485 | <i>ybaL</i> | Inner membrane protein ybaL | -1,08 | -1,14 | -1,70 |
| SL0486 | <i>fsr</i> | Fosmidomycin resistance protein | -1,06 | -1,14 | 1,08 |
| SL0487 | <i>ushA</i> | Protein ushA | -1,05 | -1,36 | 4,38 |
| SL0488 | <i>ybaK</i> | Cys-tRNA(Pro)/Cys-tRNA(Cys) deacylase ybaK | 1,18 | 1,06 | 1,05 |
| SL0489 | <i>ybaP</i> | Uncharacterized protein ybaP | -1,07 | 1,01 | -1,16 |
| SL0490 | - | Hypothetical | -1,01 | 1,08 | 1,07 |
| SL0491 | <i>copA</i> | Copper-exporting P-type ATPase A | 1,09 | 1,03 | 1,74 |
| SL0492 | <i>cueR</i> | HTH-type transcriptional regulator cueR | 1,11 | 1,17 | 1,11 |
| SL0493 | <i>ybbJ</i> | Inner membrane protein ybbJ | 1,21 | 1,04 | 1,39 |
| SL0494 | <i>qmcA</i> | Protein qmcA | 1,15 | 1,29 | 1,67 |
| SL0495 | <i>ybbL</i> | Uncharacterized ABC transporter ATP-binding protein vhhI | 1,14 | 1,01 | 1,31 |
| SL0496 | <i>ybbM</i> | UPF0014 inner membrane protein ybbM | 1,25 | 1,06 | 1,16 |
| SL0497 | <i>ybbN</i> | Uncharacterized protein ybbN | 1,16 | -1,06 | 1,46 |
| SL0498 | <i>ybbO</i> | Uncharacterized oxidoreductase ybbO | 1,02 | -1,08 | -1,65 |
| SL0499 | <i>tesA</i> | Acyl-CoA thioesterase I | 1,02 | 1,03 | -1,45 |
| SL0500 | <i>ybbA</i> | Uncharacterized ABC transporter ATP-binding protein ybbA | 1,09 | -1,07 | -1,15 |
| SL0501 | <i>ybbP</i> | Uncharacterized ABC transporter permease ybbP | 1,26 | -1,04 | 1,17 |
| SL0502 | - | Outer Membrane Protein | 1,25 | -1,12 | 2,30 |
| SL0503 | <i>metQ</i> | D-methionine-binding lipoprotein metQ | -1,21 | -1,07 | 1,10 |
| SL0504 | <i>metN2</i> | Methionine import ATP-binding protein MetN 2 | -1,32 | -1,34 | -1,78 |
| SL0505 | <i>metl</i> | Probable D-methionine transport system permease protein metl | -1,24 | -1,04 | -1,78 |
| SL0506 | <i>selU</i> | tRNA 2-selenouridine synthase | 1,04 | 1,07 | -1,28 |
| SL0507 | <i>allS</i> | HTH-type transcriptional activator AllS | 1,23 | 1,15 | 7,16 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL0508 | <i>allA</i> | Ureidoglycolate hydrolase | -1,06 | -1,21 | 2,65 |
| SL0509 | <i>allR</i> | HTH-type transcriptional repressor AllR | 1,18 | 1,02 | 1,23 |
| SL0510 | <i>gcl</i> | Glyoxylate carboligase | 1,65 | -1,22 | 7,44 |
| SL0511 | <i>hyi</i> | Hydroxypyruvate isomerase | 1,41 | -1,11 | 10,16 |
| SL0512 | <i>glxR</i> | 2-hydroxy-3-oxopropionate reductase | 1,60 | -1,03 | 5,13 |
| SL0513 | <i>ybO</i> | Uncharacterized transporter ybO | 1,43 | 1,14 | 4,88 |
| SL0514 | <i>ybbV</i> | Cytoplasmic Protein | 1,13 | 1,13 | 1,70 |
| SL0515 | <i>ybbW</i> | Putative allantoin permease | 1,66 | 1,02 | 3,89 |
| SL0516 | <i>allB</i> | Allantoinase | 1,05 | 1,11 | 2,94 |
| SL0517 | <i>ybbY</i> | Putative purine permease ybbY | -1,12 | 1,01 | 1,32 |
| SL0518 | <i>glxK</i> | Glycerate kinase 1 | 1,20 | 1,10 | 2,36 |
| SL0519 | <i>ylbA</i> | Uncharacterized protein ylbA | -1,04 | -1,27 | 2,29 |
| SL0520 | <i>allC</i> | Allantoate amidohydrolase | -1,08 | -1,17 | 3,13 |
| SL0521 | <i>allD</i> | Ureidoglycolate dehydrogenase | -1,04 | -1,46 | 5,10 |
| SL0522 | <i>fdrA</i> | Protein fdrA | 1,14 | 1,12 | 3,41 |
| SL0523 | <i>ylbE</i> | Uncharacterized protein ylbE | 1,09 | -1,20 | 3,61 |
| SL0524 | <i>ylbF</i> | Uncharacterized protein ylbF | 1,09 | -1,09 | 1,09 |
| SL0525 | <i>arcC</i> | Carbamate kinase | 1,05 | 1,29 | 1,23 |
| SL0526 | <i>purK</i> | Phosphoribosylaminoimidazole carboxylase ATPase subunit | 1,06 | 1,05 | -1,87 |
| SL0527 | <i>purE</i> | Phosphoribosylaminoimidazole carboxylase catalytic subunit | 1,17 | 1,38 | -1,67 |
| SL0528 | <i>lpXH</i> | UDP-2,3-diacylglucosamine hydrolase | 1,03 | -1,11 | -1,92 |
| SL0529 | <i>ppiB</i> | Peptidyl-prolyl cis-trans isomerase B | 1,02 | -1,14 | -1,13 |
| SL0530 | <i>cysS</i> | Cysteinyl-tRNA synthetase | -1,14 | -1,15 | -1,56 |
| SL0531 | - | Hypothetical | -1,03 | -1,15 | -1,06 |
| SL0532 | - | Hypothetical | -1,09 | -1,06 | -1,49 |
| SL0533 | <i>ybcI</i> | Inner membrane protein ybcI | -1,08 | 1,05 | -2,95 |
| SL0534 | <i>ybcJ</i> | Uncharacterized protein ybcJ | -1,04 | -1,13 | -1,25 |
| SL0535 | <i>folD</i> | Bifunctional protein folD | 1,04 | 1,00 | -1,44 |
| SL0536 | <i>sfmA</i> | Fimbrial subunit type 1 | -1,80 | 1,10 | -9,56 |
| SL0537 | <i>fimI</i> | Putative fimbrin-like protein fimI | -2,48 | -1,26 | -17,41 |
| SL0538 | <i>fimC</i> | Chaperone protein fimC | -2,52 | -1,37 | -22,44 |
| SL0539 | <i>fimD</i> | Outer membrane usher protein fimD | -1,99 | -1,09 | -5,31 |
| SL0540 | <i>fimH</i> | Protein fimH | -1,50 | -1,09 | -2,74 |
| SL0541 | <i>fimF</i> | Fimbrial-like protein fimF | -1,19 | -1,04 | -1,45 |
| SL0542 | <i>fimZ</i> | Fimbriae Z protein | -1,27 | 1,09 | -2,40 |
| SL0543 | <i>fimY</i> | Fimbriae Y protein | 1,43 | 1,29 | -2,23 |
| SL0544 | - | Hypothetical | -1,17 | 1,54 | -2,09 |
| SL0545 | <i>fimW</i> | Fimbriae W protein | -1,39 | 1,23 | -1,49 |
| SL0546 | <i>nisX1</i> | Transposase for insertion sequence element IS904 | -1,03 | 1,07 | 1,47 |
| SL0547 | - | Hypothetical | -1,04 | -1,41 | -1,27 |
| SL0548 | <i>yfdH</i> | Bactoprenol glucosyl transferase homolog from prophage CPS-53 | -1,04 | -1,04 | -1,99 |
| SL0549 | <i>yfdG</i> | Bactoprenol-linked glucose translocase homolog from prophage CPS-53 | 1,09 | -1,03 | -2,84 |
| SL0550 | <i>cusS</i> | Sensor kinase cusS | -1,04 | 1,09 | -1,48 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-------------------|-------------------|-----------------------|
| SL0551 | <i>ykgD</i> | Uncharacterized HTH-type transcriptional regulator <i>ykgD</i> | 1,16 | 1,20 | 3,20 |
| SL0552 | <i>ykgC</i> | Probable pyridine nucleotide-disulfide oxidoreductase <i>ykgC</i> | 1,12 | 1,11 | 2,34 |
| SL0553 | <i>ykgI</i> | Uncharacterized protein <i>ykgI</i> | -1,13 | 1,01 | -1,17 |
| SL0554 | <i>ykgB</i> | Inner membrane protein <i>ykgB</i> | -1,12 | 1,08 | 2,01 |
| SL0555 | - | Hypothetical | -1,19 | 1,19 | -1,76 |
| SL0556 | <i>pheP</i> | Phenylalanine-specific permease | 1,06 | -1,04 | -1,29 |
| SL0557 | <i>ybdG</i> | Uncharacterized protein <i>ybdG</i> | -1,07 | -1,16 | 1,51 |
| SL0558 | <i>lip-1</i> | Lipase 1 | 1,12 | 1,17 | 1,79 |
| SL0559 | <i>levR</i> | Transcriptional regulatory protein <i>levR</i> | 1,07 | -1,01 | 2,64 |
| SL0560 | <i>friB</i> | Fructosamine deglycase <i>friB</i> | 1,61 | 1,34 | 2,73 |
| SL0561 | <i>glmS</i> | Glucosamine--fructose-6-phosphate aminotransferase [isomerizing] | 1,44 | 1,11 | 2,37 |
| SL0562 | <i>manZ</i> | Mannose permease IID component | 1,02 | -1,01 | 1,96 |
| SL0563 | <i>manY</i> | Mannose permease IIC component | 1,13 | 1,43 | 1,67 |
| SL0564 | <i>manX</i> | PTS system mannose-specific EIIB component | 1,15 | 1,26 | 1,23 |
| SL0565 | <i>manX</i> | PTS System Fructocific IIA Component | 1,10 | -1,19 | 1,00 |
| SL0566 | <i>nfnB</i> | Oxygen-insensitive NAD(P)H nitroreductase | 1,01 | -1,13 | 2,14 |
| SL0567 | <i>ybdF</i> | Uncharacterized protein <i>ybdF</i> | -1,01 | -1,14 | 1,04 |
| SL0568 | - | TetR Family Transcriptional Regulator | 1,00 | -1,04 | -1,29 |
| SL0569 | <i>ramA</i> | Transcriptional activator <i>ramA</i> | 1,31 | 1,08 | -1,17 |
| SL0570 | <i>ybdJ</i> | Uncharacterized protein <i>ybdJ</i> | 1,26 | 1,08 | -1,27 |
| SL0571 | <i>ybdK</i> | Carboxylate-amine ligase <i>ybdK</i> | 1,07 | 1,04 | 1,47 |
| SL0572 | <i>entD</i> | 4'-phosphopantetheinyl transferase <i>entD</i> | 1,07 | 1,60 | 1,10 |
| SL0573 | <i>fepA</i> | Ferrienterobactin receptor | -1,04 | 1,69 | 1,54 |
| SL0574 | <i>fes</i> | Enterochelin esterase | 1,20 | 1,43 | -1,26 |
| SL0575 | <i>ybdZ</i> | Uncharacterized protein <i>ybdZ</i> | 1,07 | 1,17 | 1,03 |
| SL0576 | <i>entF</i> | Enterobactin synthase component F | 1,49 | 1,21 | 1,25 |
| SL0577 | <i>fepE</i> | Ferric enterobactin transport protein <i>fepE</i> | 1,02 | -1,12 | 1,27 |
| SL0578 | <i>fepC</i> | Ferric enterobactin transport ATP-binding protein <i>fepC</i> | 1,05 | 1,28 | -1,40 |
| SL0579 | <i>fepG</i> | Ferric enterobactin transport system permease protein <i>fepG</i> | 1,23 | 1,26 | -1,50 |
| SL0580 | <i>fepD</i> | Ferric enterobactin transport system permease protein <i>fepD</i> | -1,03 | 1,00 | -1,10 |
| SL0581 | <i>entS</i> | Enterobactin exporter <i>entS</i> | 1,08 | 1,21 | -1,05 |
| SL0582 | <i>fepB</i> | Ferrienterobactin-binding periplasmic protein | -1,16 | 1,09 | -1,24 |
| SL0583 | <i>entC</i> | Isochorismate synthase <i>entC</i> | -1,05 | 1,72 | -1,07 |
| SL0584 | <i>entE</i> | Enterobactin synthase component E | 1,12 | 1,76 | 1,30 |
| SL0585 | <i>entB</i> | Isochorismatase | 1,10 | 1,23 | 2,00 |
| SL0586 | <i>entA</i> | 2,3-dihydro-2,3-dihydroxybenzoate dehydrogenase | 1,11 | -1,28 | 2,33 |
| SL0587 | <i>ybdB</i> | Esterase <i>ybdB</i> | -1,13 | -1,04 | 2,26 |
| SL0588 | <i>cstA</i> | Carbon starvation protein A | -1,16 | -1,23 | 9,48 |
| SL0589 | <i>ybdD</i> | Uncharacterized protein <i>ybdD</i> | -1,21 | -1,30 | 9,97 |
| SL0590 | <i>ybdH</i> | Uncharacterized oxidoreductase <i>ybdH</i> | -1,04 | -1,11 | 1,63 |
| SL0591 | <i>ybdL</i> | Aminotransferase <i>ybdL</i> | 1,18 | 1,07 | -1,15 |
| SL0592 | <i>ybdM</i> | Uncharacterized protein <i>ybdM</i> | 1,15 | -1,04 | 2,44 |
| SL0593 | <i>ybdN</i> | Uncharacterized protein <i>ybdN</i> | -1,07 | -1,21 | -1,24 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-------------------|-------------------|-----------------------|
| SL0594 | <i>ybdO</i> | Uncharacterized HTH-type transcriptional regulator <i>ybdO</i> | -1,14 | -1,05 | 1,04 |
| SL0595 | <i>dsbG</i> | Thiol:disulfide interchange protein <i>dsbG</i> | 1,09 | -1,13 | 1,69 |
| SL0596 | <i>ahpC</i> | Alkyl hydroperoxide reductase subunit C | 1,12 | 1,10 | -2,32 |
| SL0597 | <i>ahpF</i> | Alkyl hydroperoxide reductase subunit F | -1,10 | -1,02 | -2,42 |
| SL0598 | <i>ynfI</i> | Cytoplasmic Chaperone rD Family Protein | 1,33 | 1,02 | -3,67 |
| SL0599 | <i>yyaE</i> | Probable oxidoreductase <i>yyaE</i> | 1,16 | 1,09 | -1,10 |
| SL0600 | <i>dmsB</i> | Anaerobic dimethyl sulfoxide reductase chain B | 1,03 | -1,04 | -1,23 |
| SL0601 | <i>ynfH</i> | DMSO Reductase Anchor Subunit | 1,48 | -1,05 | -1,09 |
| SL0602 | <i>uspG</i> | Universal stress protein G | 1,17 | 1,45 | 1,37 |
| SL0603 | <i>ybdR</i> | Uncharacterized zinc-type alcohol dehydrogenase-like protein <i>ybdR</i> | 1,40 | 1,34 | 1,93 |
| SL0604 | <i>rnk</i> | Regulator of nucleoside diphosphate kinase | 1,33 | 1,18 | 1,48 |
| SL0605 | <i>rna</i> | Ribonuclease I | -1,07 | 1,13 | -2,35 |
| SL0606 | <i>citT</i> | Citrate carrier | -1,20 | 1,14 | -1,87 |
| SL0607 | <i>citG2</i> | Probable 2-(5"-triphosphoribosyl)-3'-dephosphocoenzyme-A synthase 2 | -1,07 | 1,03 | -1,25 |
| SL0608 | <i>citX</i> | Apo-citrate lyase phosphoribosyl-dephospho-CoA transferase | -1,04 | -1,08 | -1,87 |
| SL0609 | <i>citF</i> | Citrate lyase alpha chain | 1,17 | 1,26 | -1,61 |
| SL0610 | <i>citE</i> | Citrate lyase subunit beta | 1,06 | 1,12 | -2,50 |
| SL0611 | <i>citD1</i> | Citrate lyase acyl carrier protein 1 | -1,06 | 1,09 | -2,36 |
| SL0612 | <i>citC</i> | [Citrate [pro-3S]-lyase] ligase | -1,02 | 1,10 | -2,47 |
| SL0613 | <i>dpiB</i> | Sensor histidine kinase DpiB | -1,09 | 1,19 | -3,56 |
| SL0614 | <i>dpiA</i> | Transcriptional regulatory protein DpiA | 1,03 | 1,04 | -2,28 |
| SL0615 | <i>dcuC</i> | Anaerobic C4-dicarboxylate transporter <i>dcuC</i> | 1,18 | 1,06 | -2,87 |
| SL0616 | <i>crcA</i> | Protein <i>crcA</i> | -1,02 | 1,07 | -6,65 |
| SL0617 | <i>cspE</i> | Cold shock-like protein <i>cspE</i> | -1,33 | 1,02 | -2,78 |
| SL0618 | <i>crcB</i> | Protein <i>crcB</i> homolog | 1,38 | 1,24 | -1,21 |
| SL0619 | <i>ybeM</i> | UPF0012 hydrolase <i>ybeM</i> | 1,12 | 1,37 | 1,07 |
| SL0620 | <i>tatE</i> | Sec-independent protein translocase protein <i>tatE</i> | -1,01 | 1,14 | -2,04 |
| SL0621 | <i>lipA</i> | Lipoyl synthase | 1,20 | 1,03 | -1,65 |
| SL0622 | <i>ybeF</i> | Uncharacterized HTH-type transcriptional regulator <i>ybeF</i> | 1,11 | -1,05 | -1,06 |
| SL0623 | <i>lipB</i> | Octanoyltransferase | 1,05 | -1,03 | -1,53 |
| SL0624 | <i>ybeD</i> | UPF0250 protein Ent638_1166 | 1,11 | 1,28 | -1,12 |
| SL0625 | <i>dacA</i> | D-alanyl-D-alanine carboxypeptidase <i>dacA</i> | -1,04 | 1,03 | -2,41 |
| SL0626 | <i>rlpA</i> | Rare lipoprotein A | 1,08 | 1,09 | -1,04 |
| SL0627 | <i>mrdB</i> | Rod shape-determining protein <i>rodA</i> | 1,21 | -1,03 | 1,39 |
| SL0628 | <i>mrdA</i> | Penicillin-binding protein 2 | 1,10 | -1,05 | -1,38 |
| SL0629 | <i>rlmH</i> | Ribosomal RNA large subunit methyltransferase H | -1,09 | -1,08 | -1,70 |
| SL0630 | <i>ybeB</i> | Uncharacterized protein <i>ybeB</i> | -1,19 | -1,10 | -1,91 |
| SL0631 | <i>cobC</i> | Alpha-ribazole phosphatase | -1,01 | 1,06 | 1,49 |
| SL0632 | <i>cobD</i> | Threonine-phosphate decarboxylase | 1,21 | 1,26 | 1,02 |
| SL0633 | <i>nadD</i> | Probable nicotinate-nucleotide adenyllyltransferase | 1,17 | -1,04 | -1,19 |
| SL0634 | <i>holA</i> | DNA polymerase III subunit delta | 1,15 | -1,07 | -1,43 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL0635 | <i>lptE</i> | LPS-assembly lipoprotein lptE | 1,05 | -1,13 | -1,20 |
| SL0636 | <i>leuS</i> | Leucyl-tRNA synthetase | 1,07 | -1,08 | -1,44 |
| SL0637 | <i>uxaA</i> | SAF Domain-Containing Protein | 1,26 | -1,00 | -7,34 |
| SL0638 | <i>uxaA</i> | Altronate hydrolase | 1,24 | -1,26 | -5,57 |
| SL0639 | <i>kdgT2</i> | 2-keto-3-deoxygluconate permease 2 | 1,23 | 1,24 | -2,50 |
| SL0640 | <i>yqiR</i> | Putative sigma L-dependent transcriptional regulator yqiR | 1,11 | 1,16 | 1,94 |
| SL0641 | <i>ybeL</i> | Uncharacterized protein ybeL | 1,43 | 1,38 | 4,14 |
| SL0642 | <i>ybeQ</i> | Uncharacterized protein ybeQ | 1,10 | 1,13 | 2,20 |
| SL0643 | <i>ybeR</i> | Uncharacterized protein ybeR | -1,39 | -1,21 | 1,43 |
| SL0644 | <i>djlC</i> | Uncharacterized J domain-containing protein djlC | -1,25 | -1,33 | 1,98 |
| SL0645 | <i>ybeU</i> | Uncharacterized protein ybeU | -1,32 | -1,27 | 1,97 |
| SL0646 | <i>ybeU</i> | Uncharacterized protein ybeU | -1,29 | -1,16 | -1,14 |
| SL0647 | <i>djlC</i> | Uncaracterized J domain-containing protein djlC | -1,12 | -1,19 | -1,31 |
| SL0648 | <i>hscC</i> | Chaperone protein hscC | 1,19 | 1,18 | 1,80 |
| SL0649 | - | Hypothetical | -1,06 | 1,02 | 2,03 |
| SL0650 | <i>rihA</i> | Pyrimidine-specific ribonucleoside hydrolase rihA | -1,07 | -1,01 | 2,38 |
| SL0651 | <i>gltL</i> | Glutamate/aspartate transport A1P-binding | -1,77 | -2,15 | 8,59 |
| SL0652 | <i>gltK</i> | Glutamate/aspartate transport system permease | -1,72 | -2,00 | 8,36 |
| SL0653 | <i>gltJ</i> | Glutamate/aspartate transport system permease protein gltJ | -1,52 | -1,47 | 5,50 |
| SL0654 | <i>gltI</i> | Glutamate/aspartate periplasmic-binding protein | -1,40 | -1,20 | 6,78 |
| SL0655 | <i>Int</i> | Apolipoprotein N-acyltransferase | -1,21 | -1,42 | -2,17 |
| SL0656 | <i>corC</i> | Magnesium and cobalt efflux protein corC | -1,29 | -1,29 | -1,14 |
| SL0657 | <i>ybeY</i> | Putative metalloprotease ybeY | -1,05 | -1,05 | -1,29 |
| SL0658 | <i>ybeZ</i> | PhoH-like protein | -1,11 | -1,24 | -1,27 |
| SL0659 | <i>miaB</i> | (Dimethylallyl)adenosine tRNA methylthiotransferase miaB | 1,06 | 1,03 | -1,50 |
| SL0660 | <i>ubiF</i> | 2-Octaprenyl-3-methyl-6-methoxy-1,4-henzozuinal hydroxylase | 1,46 | 1,20 | 2,78 |
| SL0661 | - | Hypothetical | 1,37 | 1,23 | 1,51 |
| SL0662 | <i>asnB</i> | Asparagine synthetase B [glutamine-hydrolyzing] | -1,09 | -1,12 | 1,62 |
| SL0663 | <i>nagD</i> | Protein nagD | 1,05 | -1,13 | -1,32 |
| SL0664 | <i>nagC</i> | N-acetylglucosamine repressor | 1,07 | -1,13 | -1,37 |
| SL0665 | <i>nagA</i> | N-acetylglucosamine-6-phosphate deacetylase | -1,01 | -1,03 | 1,11 |
| SL0666 | <i>nagB</i> | Glucosamine-6-phosphate deaminase | 1,12 | 1,19 | 1,15 |
| SL0667 | <i>nagE</i> | PTS system N-acetylglucosamine-specific EIICBA component | 1,06 | 1,08 | 1,88 |
| SL0668 | <i>glnS</i> | Glutaminyl-tRNA synthetase | 1,03 | 1,01 | -1,52 |
| SL0669 | <i>ybfM</i> | Uncharacterized protein ybfM | -1,09 | -1,10 | 2,74 |
| SL0670 | <i>ybfN</i> | Uncharacterized lipoprotein ybfN | 1,01 | -1,18 | 3,34 |
| SL0671 | <i>citA</i> | Citrate-proton symporter | -1,21 | -1,15 | 2,57 |
| SL0672 | <i>citB</i> | Citrate utilization protein B | 1,06 | -1,08 | 3,82 |
| SL0673 | <i>ifcA</i> | Fumarate reductase flavoprotein subunit | -1,01 | -1,07 | 2,24 |
| SL0674 | <i>nac</i> | Nitrogen assimilation regulatory protein nac | 1,08 | -1,12 | -1,21 |
| SL0675 | <i>fur</i> | Ferric uptake regulation protein | 1,00 | 1,07 | -2,81 |
| SL0676 | <i>fldA</i> | Flavodoxin-1 | -1,03 | 1,01 | -1,98 |
| SL0677 | <i>ybfE</i> | Uncharacterized protein ybfE | 1,32 | 1,22 | -1,29 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-------------------|-------------------|-----------------------|
| SL0678 | <i>ybfF</i> | Esterase <i>ybfF</i> | 1,16 | 1,04 | -1,32 |
| SL0679 | <i>seqA</i> | Protein <i>seqA</i> | -1,05 | -1,03 | -1,76 |
| SL0680 | <i>pgm</i> | Phosphoglucomutase | 1,14 | -1,04 | 1,35 |
| SL0681 | - | 5-Nitroimidazole Antibiotic Resistance Protein | 1,06 | 1,14 | -5,70 |
| SL0682 | <i>potE</i> | Putrescine-ornithine antiporter | 1,06 | -1,20 | -4,57 |
| SL0683 | <i>speF</i> | Ornithine decarboxylase, inducible | 1,04 | -1,26 | -4,29 |
| SL0684 | <i>kdpE</i> | KDP operon transcriptional regulatory protein <i>kdpE</i> | -1,05 | -1,01 | 1,34 |
| SL0685 | <i>kdpD</i> | Sensor protein <i>kdpD</i> | 1,07 | 1,06 | 1,42 |
| SL0686 | <i>kdpC</i> | Potassium-transporting ATPase C chain | 1,06 | 1,16 | 1,32 |
| SL0687 | <i>kdpB</i> | Potassium-transporting ATPase B chain | 1,16 | 1,11 | 1,70 |
| SL0688 | <i>kdpA</i> | Potassium-transporting ATPase A chain | -1,01 | -1,07 | 1,15 |
| SL0689 | <i>ybfA</i> | Uncharacterized protein <i>ybfA</i> | 1,23 | 1,38 | -1,11 |
| SL0690 | <i>phrB</i> | Deoxyribodipyrimidine photo-lyase | 1,15 | 1,03 | -1,55 |
| SL0691 | <i>dtpD</i> | Dipeptide permease D | 1,38 | -1,01 | -2,14 |
| SL0692 | <i>ybgI</i> | UPF0135 protein <i>ybgI</i> | 1,14 | 1,06 | 2,27 |
| SL0693 | <i>ybgJ</i> | Uncharacterized protein <i>ybgJ</i> | 1,17 | 1,00 | 2,74 |
| SL0694 | <i>ybgK</i> | Uncharacterized protein <i>ybgK</i> | 1,17 | -1,07 | 2,38 |
| SL0695 | <i>ybgL</i> | UPF0271 protein <i>ybgL</i> | 1,32 | 1,26 | 1,48 |
| SL0696 | - | Hypothetical | 1,10 | 1,37 | -1,72 |
| SL0697 | <i>fimB</i> | Type 1 fimbriae regulatory protein <i>fimB</i> | -1,14 | -1,03 | -1,63 |
| SL0698 | - | Hypothetical | 1,23 | 1,03 | 1,00 |
| SL0699 | - | Hypothetical | -1,17 | 1,06 | 1,10 |
| SL0700 | <i>rfbD</i> | Probable UDP-galactopyranose mutase | 1,29 | 1,34 | -1,11 |
| SL0701 | <i>rfbD</i> | Probable UDP-galactopyranose mutase | 1,07 | 1,04 | -1,02 |
| SL0702 | - | Glycosyltransferase | -1,07 | -1,10 | 1,03 |
| SL0703 | - | Glycosyltransferase | 1,17 | 1,16 | 1,07 |
| SL0704 | <i>rfbD</i> | O-antigen export system permease protein <i>rfbD</i> | 1,06 | -1,06 | 1,07 |
| SL0705 | <i>rfbE</i> | O-antigen export system ATP-binding protein <i>rfbE</i> | 1,04 | -1,10 | 1,12 |
| SL0706 | <i>glfT2</i> | UDP-galactofuranosyl transferase GlfT2 | 1,08 | 1,08 | 1,25 |
| SL0707 | - | Hypothetical | 1,02 | 1,07 | 1,06 |
| SL0708 | - | Hypothetical | 1,14 | -1,02 | 1,00 |
| SL0709 | - | Hypothetical | 1,15 | -1,07 | -1,32 |
| SL0710 | <i>nei</i> | Endonuclease 8 | 1,01 | -1,05 | -1,01 |
| SL0711 | <i>abrB</i> | Protein AbrB | 1,38 | 1,17 | 2,71 |
| SL0712 | <i>gltA</i> | Citrate synthase | 1,06 | -1,00 | 2,70 |
| SL0713 | - | Hypothetical | -1,31 | -1,16 | 3,77 |
| SL0714 | <i>sdhC</i> | Succinate dehydrogenase cytochrome b556 subunit | -1,15 | -1,23 | 8,34 |
| SL0715 | <i>sdhD</i> | Succinate dehydrogenase hydrophobic membrane anchor subunit | -1,10 | -1,29 | 6,00 |
| SL0716 | <i>sdhA</i> | Succinate dehydrogenase flavoprotein subunit | -1,00 | -1,20 | 8,19 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-------------------|-------------------|-----------------------|
| SL0717 | <i>sdhB</i> | Succinate dehydrogenase iron-sulfur subunit | -1,01 | -1,14 | 8,63 |
| SL0718 | <i>sucA</i> | 2-oxoglutarate dehydrogenase E1 component | 1,01 | -1,26 | 2,25 |
| SL0719 | <i>sucB</i> | Dihydrolipoyllysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex | 1,09 | -1,10 | 2,41 |
| SL0720 | <i>sucC</i> | Succinyl-CoA ligase [ADP-forming] subunit beta | 1,14 | -1,24 | 3,54 |
| SL0721 | <i>sucD</i> | Succinyl-CoA ligase [ADP-forming] subunit alpha | 1,10 | -1,07 | 2,39 |
| SL0722 | <i>cydA</i> | Cytochrome d ubiquinol oxidase subunit 1 | 1,06 | -1,03 | 1,13 |
| SL0723 | <i>cydB</i> | Cytochrome d ubiquinol oxidase subunit 2 | 1,03 | -1,02 | 1,12 |
| SL0724 | <i>ybgT</i> | Uncharacterized protein ybgT | 1,07 | 1,05 | 1,33 |
| SL0725 | <i>ybgE</i> | Uncharacterized protein ybgE | 1,02 | -1,21 | 1,07 |
| SL0726 | <i>ybgC</i> | Acyl-CoA thioester hydrolase ybgC | -1,13 | 1,13 | -2,47 |
| SL0727 | <i>tolQ</i> | Protein tolQ | -1,29 | -1,15 | -2,54 |
| SL0728 | <i>tolR</i> | Protein tolR | -1,08 | -1,01 | -2,59 |
| SL0729 | <i>tolA</i> | Protein tolA | 1,01 | 1,18 | -2,07 |
| SL0730 | <i>tolB</i> | Protein tolB | 1,03 | 1,05 | 1,45 |
| SL0731 | <i>pal</i> | Peptidoglycan-associated lipoprotein | -1,13 | -1,02 | 1,75 |
| SL0732 | <i>ybgF</i> | Uncharacterized protein YbgF | -1,47 | -1,22 | 1,06 |
| SL0733 | <i>nadA</i> | Quinolinate synthase A | 1,18 | 1,13 | -1,61 |
| SL0734 | <i>pnuC</i> | Nicotinamide riboside transporter pnuC | 1,26 | 1,02 | 1,31 |
| SL0735 | <i>zitB</i> | Zinc transporter zitB | 1,30 | 1,07 | 1,95 |
| SL0736 | <i>ybgS</i> | Uncharacterized protein ybgS | 1,23 | 1,34 | -1,11 |
| SL0737 | <i>aroG</i> | Phospho-2-dehydro-3-deoxyheptonate aldolase, Phe-sensitive | 1,10 | -1,03 | -1,14 |
| SL0738 | <i>fumB</i> | Fumarate hydratase class I, anaerobic | 1,05 | 1,17 | 1,42 |
| SL0739 | <i>ttdA</i> | Putative fumarate hydratase subunit alpha | 1,18 | 1,10 | 1,78 |
| SL0740 | <i>ywbl</i> | Uncharacterized HTH-type transcriptional regulator ywbl | 1,10 | 1,17 | 3,02 |
| SL0741 | <i>yjiE</i> | Uncharacterized HTH-type transcriptional regulator yjiE | 1,22 | 1,44 | 1,29 |
| SL0742 | <i>yfbS</i> | Uncharacterized transporter MJ0672 | 1,28 | 1,16 | 1,23 |
| SL0743 | <i>oadG3</i> | Oxaloacetate decarboxylase gamma chain 3 | 1,07 | -1,07 | 1,60 |
| SL0745 | <i>oadB1</i> | Oxaloacetate decarboxylase beta chain 1 | 1,38 | 1,16 | 2,25 |
| SL0746 | <i>citG</i> | 2-(5"-triphosphoribosyl)-3'-dephosphocoenzyme-A synthase | 1,60 | 1,35 | 2,94 |
| SL0747 | <i>fecD</i> | Putative ABC transporter permease protein MJ0087 | 1,06 | 1,44 | 1,49 |
| SL0748 | <i>fhuC</i> | Iron(3+)-hydroxamate import ATP-binding protein fhuC | 1,23 | -1,06 | 1,00 |
| SL0749 | <i>gpmA</i> | 2,3-bisphosphoglycerate-dependent phosphoglycerate mutase | 1,08 | 1,01 | 1,94 |
| SL0750 | <i>galM</i> | Aldose 1-epimerase | 1,18 | -1,06 | -1,02 |
| SL0751 | <i>galK</i> | Galactokinase | 1,21 | 1,04 | 1,01 |
| SL0752 | <i>galT</i> | Galactose-1-phosphate uridylyltransferase | 1,22 | 1,11 | 1,52 |
| SL0753 | <i>galE</i> | UDP-glucose 4-epimerase | 1,12 | 1,17 | 2,06 |
| SL0754 | - | Hypothetical | 1,17 | 1,03 | -1,09 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-------------------|-------------------|-----------------------|
| SL0755 | <i>modF</i> | Putative molybdenum transport ATP-binding protein modF | -1,11 | -1,19 | -1,25 |
| SL0756 | <i>modE</i> | Transcriptional regulator modE | -1,01 | 1,03 | -1,08 |
| SL0757 | <i>ybhT</i> | Uncharacterized protein ybhT | 1,09 | 1,18 | -1,89 |
| SL0758 | <i>modA</i> | Molybdate-binding periplasmic protein | -1,45 | 1,09 | -1,83 |
| SL0759 | <i>modB</i> | Molybdenum transport system permease protein modB | -1,30 | -1,10 | -1,93 |
| SL0760 | <i>modC</i> | Molybdenum import ATP-binding protein ModC | -1,14 | -1,11 | -2,39 |
| SL0761 | <i>ybhA</i> | Phosphatase ybhA | -1,04 | -1,03 | -1,04 |
| SL0762 | <i>pgl</i> | 6-phosphogluconolactonase | 1,19 | 1,08 | 2,28 |
| SL0763 | <i>ybhC</i> | Putative acyl-CoA thioester hydrolase ybhC | 1,16 | -1,13 | 1,36 |
| SL0764 | <i>hutI</i> | Imidazolonepropionase | 1,16 | 1,05 | 3,21 |
| SL0765 | <i>hutG</i> | Formimidoylglutamase | 1,08 | -1,06 | 4,38 |
| SL0766 | <i>hutC</i> | Histidine utilization repressor | -1,14 | -1,08 | 2,51 |
| SL0767 | <i>hutU</i> | Urocanate hydratase | -1,11 | -1,18 | 21,16 |
| SL0768 | <i>hutH</i> | Histidine ammonia-lyase | -1,22 | -1,51 | 18,07 |
| SL0769 | <i>ybhB</i> | UPF0098 protein ybhB | 1,14 | -1,07 | 1,83 |
| SL0770 | <i>bioA</i> | Adenosylmethionine-8-amino-7-oxononanoate aminotransferase | 1,06 | 1,01 | -1,01 |
| SL0771 | <i>bioB</i> | Biotin synthase | -1,22 | -1,11 | 2,06 |
| SL0772 | <i>bioF</i> | 8-amino-7-oxononanoate synthase | -1,01 | -1,00 | 1,64 |
| SL0773 | <i>bioC</i> | Biotin synthesis protein BioC | 1,36 | 1,15 | 1,31 |
| SL0774 | <i>bioD</i> | Dethiobiotin synthetase | 1,44 | -1,15 | 1,94 |
| SL0775 | <i>uvrB</i> | UvrABC system protein B | 1,01 | -1,01 | -1,36 |
| SL0776 | <i>slrP</i> | E3 ubiquitin-protein ligase slrP | -1,49 | -1,17 | -6,12 |
| SL0777 | <i>ybhK</i> | UPF0052 protein ybhK | 1,21 | 1,19 | 1,61 |
| SL0778 | <i>moaA</i> | Molybdenum cofactor biosynthesis protein A | 1,04 | 1,26 | -1,52 |
| SL0779 | <i>moaB</i> | Molybdenum cofactor biosynthesis protein B | 1,17 | 1,24 | 1,86 |
| SL0780 | <i>moaC</i> | Molybdenum cofactor biosynthesis protein C | 1,17 | 1,08 | 2,26 |
| SL0781 | <i>moaD</i> | Molybdopterin synthase sulfur carrier subunit | 1,13 | 1,02 | 2,25 |
| SL0782 | <i>moaE</i> | Molybdopterin synthase catalytic subunit | 1,38 | 1,21 | 2,41 |
| SL0783 | <i>ybhL</i> | Inner membrane protein ybhL | 1,27 | 1,15 | 1,75 |
| SL0784 | <i>ybhM</i> | Uncharacterized protein ybhM | 1,07 | 1,13 | -1,09 |
| SL0785 | - | Inner Membrane Protein | -1,41 | -1,08 | -1,58 |
| SL0786 | - | Inner Membrane Protein | 1,01 | 1,17 | -1,12 |
| SL0787 | <i>ybhN</i> | Inner membrane protein ybhN | 1,01 | -1,08 | -1,19 |
| SL0788 | <i>ybhO</i> | Putative cardiolipin synthase ybhO | -1,04 | 1,03 | -1,29 |
| SL0789 | <i>ybhP</i> | Uncharacterized protein ybhP | 1,04 | 1,12 | -1,66 |
| SL0790 | <i>ybhQ</i> | Inner membrane protein ybhQ | 1,34 | 1,59 | 1,17 |
| SL0791 | <i>ybhR</i> | Inner membrane transport permease ybhR | 1,32 | 1,20 | -1,03 |
| SL0792 | <i>ybhS</i> | Inner membrane transport permease ybhS | 1,08 | 1,04 | -1,21 |
| SL0793 | <i>ybhF</i> | Uncharacterized ABC transporter ATP-binding protein ybhF | -1,05 | -1,08 | -1,20 |
| SL0794 | <i>ybhG</i> | UPF0194 membrane protein CKO_02332 | -1,05 | 1,04 | -1,08 |
| SL0795 | <i>ybiH</i> | Uncharacterized HTH-type transcriptional regulator ybiH | -1,06 | -1,03 | 1,60 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL0796 | <i>rhlE</i> | ATP-dependent RNA helicase rhlE | -1,30 | -1,24 | -4,28 |
| SL0797 | <i>dinG</i> | Probable ATP-dependent helicase dinG | -1,10 | -1,05 | -1,18 |
| SL0798 | <i>ybiB</i> | Uncharacterized protein ybiB | 1,20 | 1,05 | 1,16 |
| SL0799 | <i>ybiJ</i> | Uncharacterized protein ybiJ | -1,05 | -1,01 | -3,65 |
| SL0800 | <i>ybil</i> | Uncharacterized protein ybil | 1,15 | 1,02 | 1,03 |
| SL0801 | <i>rlmF</i> | Ribosomal RNA large subunit methyltransferase F | 1,16 | 1,15 | -1,03 |
| SL0802 | <i>ybiO</i> | Uncharacterized mscS family protein ybiO | 1,05 | 1,09 | 1,44 |
| SL0803 | <i>glnQ</i> | Glutamine transport ATP-binding protein glnQ | -1,06 | -1,33 | 2,29 |
| SL0804 | <i>glnP</i> | Glutamine transport system permease protein glnP | 1,04 | -1,28 | 1,78 |
| SL0805 | <i>glnH</i> | Glutamine-binding periplasmic protein | 1,14 | -1,22 | 3,68 |
| SL0806 | <i>dps</i> | DNA protection during starvation protein | 1,06 | 1,11 | -1,22 |
| SL0807 | <i>rhtA</i> | Inner membrane transporter rhtA | 1,01 | -1,06 | -2,23 |
| SL0808 | <i>ompX</i> | Outer membrane protein X | -1,01 | 1,19 | -2,41 |
| SL0809 | <i>ybiP</i> | Putative phosphoethanolamine transferase ybiP | 1,17 | 1,15 | -1,21 |
| SL0810 | <i>mntR</i> | Transcriptional regulator mntR | 1,08 | -1,10 | -1,25 |
| SL0811 | <i>ybiR</i> | Inner membrane protein ybiR | 1,23 | 1,01 | -1,31 |
| SL0812 | <i>ybiS</i> | Probable L,D-transpeptidase YbiS | -1,04 | 1,02 | -1,95 |
| SL0813 | <i>ybiT</i> | Uncharacterized ABC transporter ATP-binding protein ybiT | -1,23 | 1,08 | -2,82 |
| SL0814 | - | Hypothetical | -1,47 | -1,29 | 1,19 |
| SL0815 | <i>supH</i> | Sugar phosphatase supH | 1,10 | -1,04 | -1,20 |
| SL0816 | <i>ybiT</i> | Hypothetical Protein ybiT | -1,19 | 1,08 | -1,94 |
| SL0817 | <i>ybiU</i> | Uncharacterized protein ybiU | -1,13 | -1,19 | 1,74 |
| SL0818 | <i>supH</i> | Sugar phosphatase supH | -1,11 | -1,18 | 1,08 |
| SL0819 | <i>ybiW</i> | Putative formate acetyltransferase 3 | 1,08 | 1,27 | 1,45 |
| SL0820 | <i>ybiY</i> | Putative pyruvate formate-lyase 3-activating enzyme | 1,12 | 1,77 | 1,49 |
| SL0821 | <i>moeB</i> | Sulfur carrier protein moaD adenylyltransferase | -1,00 | -1,36 | -1,21 |
| SL0822 | <i>moeA</i> | Molybdopterin molybdenumtransferase | 1,08 | -1,14 | -1,52 |
| SL0823 | <i>iaaA</i> | Isoaspartyl peptidase | 1,02 | -1,05 | 1,76 |
| SL0824 | <i>gsiA</i> | Glutathione import ATP-binding protein gsiA | 1,11 | -1,26 | 2,57 |
| SL0825 | <i>gsiB</i> | Glutathione-binding protein gsiB | 1,21 | 1,04 | 3,72 |
| SL0826 | <i>gsiC</i> | Glutathione transport system permease protein gsiC | 1,27 | 1,11 | 2,09 |
| SL0827 | <i>gsiD</i> | Glutathione transport system permease protein gsiD | 1,19 | 1,02 | 1,63 |
| SL0828 | <i>rimO</i> | Ribosomal protein S12 methylthiotransferase rimO | -1,00 | 1,12 | -2,33 |
| SL0829 | <i>bssR</i> | Biofilm regulator BssR | 1,61 | 2,18 | 2,38 |
| SL0830 | - | HpcH/Hpal Aldolase | -1,01 | 1,05 | -1,52 |
| SL0831 | <i>etfB</i> | Electron transfer flavoprotein subunit beta | -1,24 | -1,19 | -1,39 |
| SL0832 | <i>etfA</i> | Electron transfer flavoprotein subunit alpha | 1,14 | 1,01 | -1,16 |
| SL0833 | <i>mmgC</i> | Acyl-CoA dehydrogenase | -1,28 | 1,20 | -1,02 |
| SL0834 | <i>ydiS</i> | Electron transfer flavoprotein-ubiquinone oxidoreductase | -1,35 | -1,00 | 1,20 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL0835 | <i>cysL</i> | HTH-type transcriptional regulator cysL | -1,55 | 1,10 | -5,57 |
| SL0836 | <i>yxjC</i> | Uncharacterized transporter yxjC | -1,04 | 1,32 | -2,37 |
| SL0837 | <i>yilI</i> | Soluble aldose sugar dehydrogenase yilI | 1,14 | 1,03 | 1,35 |
| SL0838 | <i>yliJ</i> | Uncharacterized GST-like protein yliJ | 1,04 | -1,01 | 1,67 |
| SL0839 | <i>dacC</i> | D-alanyl-D-alanine carboxypeptidase dacC | 1,07 | 1,23 | 2,58 |
| SL0840 | <i>deoR</i> | Deoxyribose operon repressor | 1,00 | 1,10 | -2,08 |
| SL0841 | <i>ybjG</i> | Putative undecaprenyl-diphosphatase ybjG | -1,08 | 1,12 | -2,77 |
| SL0842 | <i>cmr</i> | Multidrug translocase mdfA | 1,14 | 1,06 | -1,45 |
| SL0843 | <i>ybjI</i> | Phosphatase ybjI | 1,10 | -1,03 | 1,33 |
| SL0844 | <i>ybjJ</i> | Inner membrane protein ybjJ | -1,10 | -1,10 | -1,13 |
| SL0845 | <i>ybjK</i> | Uncharacterized HTH-type transcriptional regulator ybjK | -1,08 | 1,01 | -1,20 |
| SL0846 | <i>ybjL</i> | Putative transport protein ybjL | -1,04 | 1,02 | -2,78 |
| SL0847 | <i>ybjM</i> | Inner membrane protein ybjM | 1,05 | 1,11 | -1,16 |
| SL0848 | <i>grxA</i> | Glutaredoxin-1 | -1,19 | -1,03 | -1,99 |
| SL0849 | <i>ybjC</i> | Uncharacterized protein ybjC | 1,04 | 1,12 | -1,33 |
| SL0850 | <i>nfsA</i> | Oxygen-insensitive NADPH nitroreductase | 1,04 | -1,28 | 1,25 |
| SL0851 | <i>nfsA</i> | Oxygen-insensitive NADPH nitroreductase | 1,15 | -1,05 | 1,82 |
| SL0852 | <i>rimK</i> | Ribosomal protein S6 modification protein | -1,03 | 1,29 | -1,72 |
| SL0853 | <i>ybjN</i> | Uncharacterized protein ybjN | -1,11 | 1,16 | -1,64 |
| SL0854 | <i>potF</i> | Putrescine-binding periplasmic protein | 1,10 | 1,26 | 3,91 |
| SL0855 | <i>potG</i> | Putrescine transport ATP-binding protein potG | 1,38 | 1,04 | 2,73 |
| SL0856 | <i>potH</i> | Putrescine transport system permease protein potH | 1,29 | 1,16 | 2,71 |
| SL0857 | <i>potI</i> | Putrescine transport system permease protein potI | -1,03 | -1,11 | 1,46 |
| SL0858 | <i>ybjO</i> | Inner membrane protein ybjO | 1,27 | 1,26 | -1,85 |
| SL0859 | <i>rumB</i> | 23S rRNA (uracil-5-)methyltransferase rumB | 1,19 | 1,21 | -1,78 |
| SL0860 | <i>ulaA</i> | Ascorbate-specific permease IIC component ulaA | 1,52 | 1,14 | 1,97 |
| SL0861 | <i>sgaB</i> | Phosphotransferase II B Component | 1,03 | 1,15 | 1,59 |
| SL0862 | <i>yidJ</i> | Arylsulfatase | 1,17 | 1,07 | 1,35 |
| SL0863 | <i>artJ</i> | ABC transporter arginine-binding protein 1 | 1,12 | -1,15 | 1,37 |
| SL0864 | <i>artM</i> | Arginine ABC transporter permease protein ArtM | 1,41 | -1,04 | -1,33 |
| SL0865 | <i>artQ</i> | Arginine ABC transporter permease protein ArtQ | 1,27 | -1,20 | -1,15 |
| SL0866 | <i>artl</i> | Putative ABC transporter arginine-binding protein 2 | 1,30 | 1,06 | 1,20 |
| SL0867 | <i>artP</i> | Arginine transport ATP-binding protein ArtP | 1,28 | -1,01 | -1,37 |
| SL0868 | <i>ybjP</i> | Uncharacterized lipoprotein ybjP | 1,07 | 1,01 | 1,34 |
| SL0869 | <i>ybjQ</i> | UPF0145 protein Ent638_1382 | 1,04 | 1,29 | 1,25 |
| SL0870 | <i>amiD</i> | N-acetylmuramoyl-L-alanine amidase AmiD | -1,15 | 1,05 | -1,04 |
| SL0871 | <i>ybjS</i> | Uncharacterized protein ybjS | -1,14 | 1,03 | -2,45 |
| SL0872 | <i>ybjT</i> | Uncharacterized protein ybjT | 1,04 | -1,16 | -1,01 |
| SL0873 | <i>ItaE</i> | Low specificity L-threonine aldolase | 1,04 | -1,05 | 1,14 |
| SL0874 | <i>poxB</i> | Pyruvate dehydrogenase [cytochrome] | -1,15 | -1,06 | -1,49 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-----------------------|-----------------------|---------------------------|
| SL0875 | <i>hcr</i> | NADH oxidoreductase hcr | -1,01 | -1,04 | 1,74 |
| SL0876 | <i>hcp</i> | Hydroxylamine reductase | 1,05 | 1,23 | 2,63 |
| SL0877 | <i>ybjE</i> | Uncharacterized protein ybjE | -1,02 | -1,17 | -1,41 |
| SL0878 | <i>ybjD</i> | Uncharacterized protein ybjD | -1,03 | -1,07 | 1,26 |
| SL0879 | <i>ybjX</i> | Uncharacterized protein ybjX | -1,58 | 1,10 | -5,97 |
| SL0880 | <i>macA</i> | Macrolide-specific efflux protein macA | -1,09 | 1,04 | -2,43 |
| SL0881 | <i>macB</i> | Macrolide export ATP-binding/permease protein macB | -1,11 | -1,01 | -1,49 |
| SL0882 | <i>cspD</i> | Cold shock-like protein cspD | 1,06 | 1,16 | 1,09 |
| SL0883 | <i>clpS</i> | ATP-dependent Clp protease adapter protein clpS | -1,14 | -1,01 | -3,50 |
| SL0884 | <i>clpA</i> | ATP-dependent Clp protease ATP-binding subunit clpA | 1,04 | 1,06 | -1,23 |
| SL0885 | <i>tnpA1</i> | Transposase for insertion sequence element IS200 | 1,26 | -1,00 | -2,87 |
| SL0886 | <i>insF7</i> | Insertion element IS600 uncharacterized 31 kDa protein | -1,12 | 1,38 | 1,01 |
| SL0887 | - | Transposase | -1,15 | 1,21 | 1,21 |
| SL0888 | <i>ycaC</i> | Uncharacterized protein ycaC | 1,10 | 1,07 | 2,29 |
| SL0889 | <i>yhhW</i> | Pirin-like protein PA2418 | 1,22 | 1,23 | 2,37 |
| SL0890 | <i>yafC</i> | Uncharacterized HTH-type transcriptional regulator HI_1364 | 1,06 | -1,13 | 1,48 |
| SL0891 | <i>infA</i> | Translation initiation factor IF-1 | 1,15 | -1,11 | -1,25 |
| SL0892 | - | Inner Membrane Protein | 1,14 | 1,22 | -2,29 |
| SL0893 | <i>aat</i> | Leucyl/phenylalanyl-tRNA--protein transferase | 1,20 | 1,07 | 1,08 |
| SL0894 | <i>cydC</i> | ATP-binding/permease protein cydC | 1,18 | 1,01 | 1,34 |
| SL0895 | <i>cydD</i> | ATP-binding/permease protein cydD | 1,01 | -1,03 | -2,02 |
| SL0896 | <i>trxR</i> | Thioredoxin reductase | 1,04 | -1,10 | -1,49 |
| SL0897 | <i>lrp</i> | Leucine-responsive regulatory protein | -1,12 | -1,16 | 1,30 |
| SL0898 | <i>ftsK</i> | DNA translocase ftsK | 1,09 | 1,04 | 1,38 |
| SL0899 | <i>lolA</i> | Outer-membrane lipoprotein carrier protein | 1,06 | 1,14 | -1,11 |
| SL0900 | <i>rarA</i> | Replication-associated recombination protein A | 1,06 | 1,13 | -1,38 |
| SL0901 | <i>serS</i> | Seryl-tRNA synthetase | 1,11 | 1,08 | -1,13 |
| SL0902 | <i>dmsA</i> | Anaerobic dimethyl sulfoxide reductase chain A | 1,13 | 1,10 | -1,01 |
| SL0903 | <i>dmsB</i> | Anaerobic dimethyl sulfoxide reductase chain B | 1,03 | 1,01 | -1,07 |
| SL0904 | <i>dmsC</i> | Anaerobic dimethyl sulfoxide reductase chain C | 1,17 | 1,08 | -1,05 |
| SL0905 | <i>ycaD</i> | Uncharacterized MFS-type transporter ycaD | 1,14 | 1,32 | -1,80 |
| SL0906 | <i>ycaM</i> | Inner membrane transporter ycaM | -1,03 | 1,22 | 1,28 |
| SL0907 | <i>pflA</i> | Pyruvate formate-lyase 1-activating enzyme | 1,08 | 1,14 | -1,86 |
| SL0908 | - | Conserved Hypothetical Protein | 1,22 | 1,31 | -1,72 |
| SL0909 | <i>sopD2</i> | Secreted effector protein sopD2 | -8,04 | 1,35 | -3,81 |
| SL0910 | <i>pflB</i> | Formate acetyltransferase 1 | 1,10 | 1,06 | -1,35 |
| SL0911 | <i>focA</i> | Probable formate transporter 1 | -1,06 | -1,08 | -7,51 |
| SL0912 | <i>ycaO</i> | UPF0142 protein ycaO | -1,14 | -1,04 | -2,38 |
| SL0913 | <i>ycaP</i> | UPF0702 transmembrane protein ycaP | -1,06 | -1,08 | 1,44 |
| SL0914 | <i>serC</i> | Phosphoserine aminotransferase | -1,00 | -1,22 | -1,35 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL0915 | <i>aroA</i> | 3-phosphoshikimate 1-carboxyvinyltransferase | 1,05 | -1,23 | -1,55 |
| SL0916 | <i>ycaL</i> | Uncharacterized metalloprotease <i>ycaL</i> | -1,00 | -1,18 | -1,17 |
| SL0917 | <i>cmk</i> | Cytidylate kinase | -1,13 | 1,12 | -2,16 |
| SL0918 | <i>rpsA</i> | 30S ribosomal protein S1 | -1,06 | -1,13 | -1,22 |
| SL0919 | <i>ihfB</i> | Integration host factor subunit beta | -1,03 | 1,05 | -1,01 |
| SL0920 | <i>ycaL</i> | Uncharacterized protein <i>ycaL</i> | -1,19 | -1,09 | -1,23 |
| SL0921 | <i>msbA</i> | Lipid A export ATP-binding/permease protein <i>msbA</i> | -1,08 | -1,02 | -2,20 |
| SL0922 | <i>lpxK</i> | Tetraacyldisaccharide 4'-kinase | -1,03 | -1,33 | -1,71 |
| SL0923 | <i>ycaQ</i> | Uncharacterized protein <i>ycaQ</i> | 1,13 | 1,08 | -1,18 |
| SL0924 | <i>ycaR</i> | UPF0434 protein CKO_02153 | -1,00 | -1,13 | 1,15 |
| SL0925 | <i>kdsB</i> | 3-deoxy-manno-octulosonate cytidyltransferase | 1,11 | 1,05 | 1,21 |
| SL0926 | <i>ycbJ</i> | Uncharacterized protein <i>ycbJ</i> | 1,19 | 1,47 | 1,59 |
| SL0927 | <i>ycbC</i> | Uncharacterized protein <i>ycbC</i> | 1,34 | 1,35 | -1,02 |
| SL0928 | <i>smtA</i> | Protein <i>smtA</i> | 1,02 | -1,01 | -1,62 |
| SL0929 | <i>mukF</i> | Chromosome partition protein <i>mukF</i> | -1,01 | -1,09 | -1,19 |
| SL0930 | <i>mukE</i> | Chromosome partition protein <i>mukE</i> | 1,00 | -1,21 | 1,05 |
| SL0931 | <i>mukB</i> | Chromosome partition protein <i>mukB</i> | 1,03 | 1,14 | 2,29 |
| SL0932 | <i>ycbB</i> | Probable L,D-transpeptidase <i>YcbB</i> | 1,43 | 1,18 | 1,44 |
| SL0933 | <i>ycbK</i> | Uncharacterized protein <i>ycbK</i> | -1,03 | -1,01 | -1,46 |
| SL0934 | <i>ycbL</i> | Uncharacterized protein <i>ycbL</i> | 1,11 | -1,13 | -1,15 |
| SL0935 | <i>aspC</i> | Aspartate aminotransferase | 1,11 | -1,16 | -1,03 |
| SL0936 | <i>ompF</i> | Outer membrane protein F | -1,25 | -1,04 | 7,42 |
| SL0937 | <i>asnS</i> | Asparaginyl-tRNA synthetase | 1,12 | 1,02 | -1,25 |
| SL0938 | <i>lrp</i> | Uncharacterized HTH-type transcriptional regulator <i>y4tD</i> | 1,13 | 1,13 | 1,11 |
| SL0939 | <i>dpaL</i> | Diaminopropionate ammonia-lyase | 1,26 | -1,27 | 3,64 |
| SL0940 | <i>yflA</i> | Uncharacterized transporter <i>yflA</i> | 1,28 | 1,08 | 3,99 |
| SL0941 | <i>pncB</i> | Nicotinate phosphoribosyltransferase | 1,02 | 1,01 | -1,31 |
| SL0942 | <i>intQ</i> | Putative lambdoid prophage Qin defective integrase | 1,06 | -1,01 | -1,04 |
| SL0943 | - | Excisionase | -1,05 | -1,20 | 1,12 |
| SL0944 | - | Hypothetical | -1,09 | 1,11 | 1,03 |
| SL0945 | - | Hypothetical | -1,18 | 1,15 | 1,00 |
| SL0946 | <i>recE</i> | Exodeoxyribonuclease 8 | -1,40 | -1,10 | -1,93 |
| SL0947 | - | Hypothetical | -1,95 | -1,34 | -1,41 |
| SL0948 | <i>ydaE</i> | Hypothetical | -2,04 | -1,32 | -1,12 |
| SL0949 | - | Hypothetical | -2,04 | -1,24 | -2,03 |
| SL0950 | <i>dicA</i> | Regulatory Protein | -1,10 | -1,01 | -1,44 |
| SL0951 | - | Gifsy-1 Prophage CI Protein | -1,47 | 1,16 | -2,19 |
| SL0952 | <i>ydaU</i> | Uncharacterized protein <i>ydaU</i> | -2,00 | -1,28 | -1,62 |
| SL0953 | <i>ydaV</i> | Uncharacterized protein <i>ydaV</i> | -1,78 | -1,35 | 1,15 |
| SL0954 | - | Hypothetical | -1,67 | -1,31 | -1,17 |
| SL0955 | - | Hypothetical | -1,46 | -1,25 | -1,10 |
| SL0956 | - | Hypothetical | -1,16 | -1,12 | -1,06 |
| SL0957 | <i>dnl</i> | DNA-damage-inducible protein I | -1,02 | 1,05 | 1,89 |
| SL0958 | - | Hypothetical | 1,22 | -1,02 | -1,32 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL0959 | - | Hypothetical | -1,50 | -1,04 | -1,53 |
| SL0960 | - | Hypothetical | -1,65 | -1,22 | 1,17 |
| SL0961 | <i>quuQ</i> | Antitermination protein Q homolog from lambda prophage Qin | 1,11 | 1,12 | 1,93 |
| SL0962 | - | Hypothetical | -1,44 | -1,02 | -1,72 |
| SL0963 | - | Bacteriophage Protein | -1,44 | -1,22 | -2,18 |
| SL0964 | - | Hypothetical | 1,03 | -1,01 | 1,29 |
| SL0965 | - | Hypothetical | -1,87 | -1,12 | -2,25 |
| SL0966 | <i>arrD</i> | Probable lysozyme from lambda prophage DLP12 | -1,77 | -1,04 | -3,53 |
| SL0967 | <i>rzpD</i> | Putative Rz endopeptidase from lambda prophage DLP12 | -2,04 | -1,37 | -4,10 |
| SL0968 | - | Hypothetical | -2,15 | -1,28 | -3,14 |
| SL0969 | - | Phage Terminase Large Subunit | -1,39 | -1,38 | -2,08 |
| SL0970 | - | Hypothetical | -1,26 | -1,15 | -1,69 |
| SL0971 | - | Phage Portal Protein Lambda Family | -1,21 | -1,36 | -1,36 |
| SL0972 | <i>clpP1</i> | ATP-dependent Clp protease proteolytic subunit 1 | -1,40 | -1,21 | -1,11 |
| SL0973 | - | Hypothetical | -2,06 | -1,33 | -2,53 |
| SL0974 | - | Hypothetical | -1,91 | -1,39 | -2,39 |
| SL0975 | - | Minor Tail Protein Z-Like | -1,91 | -1,36 | -2,19 |
| SL0976 | - | Minor Tail Protein U | -1,73 | -1,28 | -1,96 |
| SL0977 | - | Tail Protein V | -1,62 | -1,44 | -1,74 |
| SL0978 | - | Minor Tail Component Of Putative Prophage | -1,50 | -1,12 | -1,76 |
| SL0979 | - | Minor Tail Protein | -1,52 | -1,14 | -2,27 |
| SL0980 | - | Hypothetical | -1,32 | -1,16 | -1,76 |
| SL0981 | - | Minor Tail Protein | -1,22 | -1,03 | -1,58 |
| SL0982 | <i>ail</i> | Attachment invasion locus protein | 1,00 | 1,26 | 1,48 |
| SL0983 | <i>sodC1</i> | Superoxide dismutase [Cu-Zn] 1 | -1,01 | 1,19 | 1,13 |
| SL0984 | - | Phage Minor Tail Protein L | -1,39 | -1,24 | -2,05 |
| SL0985 | - | NLP/P60 Protein | -1,25 | -1,23 | -1,45 |
| SL0986 | - | Phage Tail Assembly Protein | 1,01 | -1,07 | 1,52 |
| SL0987 | - | Hocicity Protein J | -1,70 | -1,15 | -2,37 |
| SL0988 | <i>stfQ</i> | Side tail fiber protein homolog from lambda prophage Qin | -1,78 | -1,55 | -2,71 |
| SL0989 | <i>ycdD</i> | Tail fiber assembly protein homolog from lambda prophage Fels-1 | -1,94 | -1,45 | -3,53 |
| SL0990 | - | Hypothetical | -2,79 | -1,68 | -6,38 |
| SL0991 | <i>sseI</i> | Secreted effector protein sseI | -1,56 | 1,29 | -1,47 |
| SL0992 | - | Hypothetical Protein SL0992 | -1,10 | 1,21 | -1,08 |
| SL0993 | <i>yedK</i> | Uncharacterized protein yedK | -1,37 | -1,07 | -1,98 |
| SL0994 | - | Hypothetical | -1,83 | -1,71 | -3,96 |
| SL0995 | - | Prophage Encoded Virulence Factor | -2,02 | -1,28 | -1,84 |
| SL0996 | <i>msgA</i> | Virulence protein msgA | -1,48 | -1,02 | -5,56 |
| SL0997 | <i>pepN</i> | Aminopeptidase N | 1,09 | -1,07 | 1,56 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL0998 | <i>pyrD</i> | Dihydroorotate dehydrogenase | -1,09 | 1,06 | -1,85 |
| SL0999 | <i>ycbW</i> | Uncharacterized protein <i>ycbW</i> | -1,29 | -1,11 | -3,12 |
| SL1000 | <i>ycbX</i> | Uncharacterized protein <i>ycbX</i> | -1,07 | -1,09 | -2,33 |
| SL1001 | <i>rlmL</i> | Ribosomal RNA large subunit methyltransferase L | -1,12 | -1,04 | -1,60 |
| SL1002 | <i>uup</i> | ABC transporter ATP-binding protein <i>uup</i> | 1,02 | 1,05 | 1,07 |
| SL1003 | <i>pqiA</i> | Paraquat-inducible protein A | 1,03 | 1,06 | 1,10 |
| SL1004 | <i>pqiB</i> | Paraquat-inducible protein B | -1,07 | 1,03 | 1,15 |
| SL1005 | <i>ymbA</i> | Uncharacterized lipoprotein <i>ymbA</i> | 1,01 | 1,04 | 1,58 |
| SL1006 | <i>rmf</i> | Ribosome modulation factor | 1,19 | 1,13 | -1,47 |
| SL1007 | <i>fabA</i> | 3-hydroxydecanoyl-[acyl-carrier-protein] dehydratase | 1,13 | -1,21 | -1,03 |
| SL1008 | <i>ycbZ</i> | Putative protease La homolog | 1,08 | -1,33 | -1,89 |
| SL1009 | <i>ycbG</i> | UPF0268 protein <i>ycbG</i> | 1,16 | 1,10 | 1,15 |
| SL1010 | <i>ompA</i> | Outer membrane protein A | 1,07 | 1,09 | 1,01 |
| SL1011 | <i>sulA</i> | Cell division inhibitor <i>sulA</i> | -1,19 | -1,19 | 1,39 |
| SL1012 | <i>sxy</i> | Protein <i>sxy</i> | 1,20 | 1,07 | 3,23 |
| SL1013 | <i>yccS</i> | Inner membrane protein <i>yccS</i> | 1,19 | -1,07 | -1,03 |
| SL1014 | <i>yccF</i> | Inner membrane protein <i>yccF</i> | 1,04 | -1,03 | -2,33 |
| SL1015 | <i>helD</i> | Helicase IV | 1,18 | 1,04 | 1,57 |
| SL1016 | <i>mgsA</i> | Methylglyoxal synthase | 1,08 | 1,22 | 2,85 |
| SL1017 | <i>yccT</i> | UPF0319 protein <i>yccT</i> | 1,16 | 1,27 | 1,71 |
| SL1018 | <i>yccU</i> | Uncharacterized protein <i>yccU</i> | 1,13 | 1,36 | 2,07 |
| SL1019 | <i>hspQ</i> | Heat shock protein <i>hspQ</i> | 1,14 | 1,34 | 2,80 |
| SL1020 | <i>rlmI</i> | Ribosomal RNA large subunit methyltransferase I | -1,02 | 1,16 | -1,01 |
| SL1021 | <i>ybcL</i> | UPF0098 protein <i>ybcL</i> | -1,04 | 1,11 | 1,51 |
| SL1022 | <i>ybcM</i> | Uncharacterized HTH-type transcriptional regulator <i>ybcM</i> | 1,09 | 1,05 | 1,63 |
| SL1023 | <i>yccX</i> | Acylphosphatase | 1,27 | 1,12 | 1,32 |
| SL1024 | <i>tusE</i> | Sulfurtransferase <i>tusE</i> | 1,30 | 1,04 | -1,42 |
| SL1025 | <i>yccA</i> | Inner membrane protein <i>yccA</i> | 1,09 | 1,10 | -1,06 |
| SL1026 | - | Hypothetical | -1,63 | 1,10 | -3,52 |
| SL1027 | <i>pipB</i> | Secreted effector protein <i>pipB</i> | -2,78 | 1,16 | -16,02 |
| SL1028 | - | Inner Membrane Protein | -2,14 | -1,05 | -47,98 |
| SL1029 | <i>sigE</i> | Chaperone protein <i>sigE</i> | -1,10 | 1,11 | -8,91 |
| SL1030 | <i>sopB</i> | Inositol phosphate phosphatase <i>sopB</i> | -1,10 | -1,03 | -10,63 |
| SL1031 | - | Hypothetical | -1,65 | -1,10 | -1,75 |
| SL1032 | - | Hypothetical | -1,44 | 1,03 | -1,49 |
| SL1033 | <i>pipD</i> | Probable dipeptidase | -1,10 | 1,62 | 1,52 |
| SL1034 | <i>yedV</i> | Putative sensor-like histidine kinase <i>yedV</i> | 1,17 | -1,04 | -1,35 |
| SL1035 | <i>yedW</i> | Probable transcriptional regulatory protein <i>yedW</i> | 1,08 | -1,02 | -1,21 |
| SL1036 | <i>yedX</i> | 5-hydroxyisourate hydrolase | 1,09 | 1,39 | 1,05 |
| SL1037 | <i>hpaC</i> | 4-hydroxyphenylacetate 3-monooxygenase reductase component | 1,26 | -1,03 | 1,22 |
| SL1038 | <i>hpaB</i> | 4-hydroxyphenylacetate 3-monooxygenase oxygenase component | 1,05 | 1,14 | 1,75 |
| SL1039 | <i>hpcR</i> | Homoprotocatechuate degradative operon repressor | -1,21 | 1,04 | 1,55 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-------------------|-------------------|-----------------------|
| SL1040 | <i>hpaG</i> | 4-hydroxyphenylacetate degradation bifunctional isomerase/decarboxylase | -1,05 | -1,11 | 7,56 |
| SL1041 | <i>hpcC</i> | 5-carboxymethyl-2-hydroxymuconate semialdehyde dehydrogenase | 1,01 | -1,10 | 7,23 |
| SL1042 | <i>hpcB</i> | 3,4-dihydroxyphenylacetate 2,3-dioxygenase | -1,01 | -1,16 | 6,00 |
| SL1043 | <i>hpcD</i> | 5-carboxymethyl-2-hydroxymuconate Delta-isomerase | -1,06 | -1,20 | 5,31 |
| SL1044 | <i>hpcG</i> | 2-oxo-hepta-3-ene-1,7-dioic acid hydratase | -1,17 | -1,78 | 3,18 |
| SL1045 | <i>hpcH</i> | 4-hydroxy-2-oxo-heptane-1,7-dioate aldolase | -1,41 | -2,00 | 3,02 |
| SL1046 | <i>ttuB</i> | Putative tartrate transporter | 1,13 | -1,13 | 3,69 |
| SL1047 | <i>ydiP</i> | Transcriptional Regulator AraC Family | -1,04 | -1,18 | 1,51 |
| SL1048 | <i>atsA</i> | Arylsulfatase | 1,27 | -1,06 | 2,97 |
| SL1049 | <i>iraM</i> | Anti-adapter protein iraM | -1,15 | 1,06 | -2,94 |
| SL1050 | <i>cbpM</i> | Chaperone modulatory protein cbpM | 1,03 | 1,11 | 1,67 |
| SL1051 | <i>cbpA</i> | Curved DNA-binding protein | 1,11 | 1,22 | 1,33 |
| SL1052 | - | Metal Resistance Protein | 1,01 | 1,11 | -1,66 |
| SL1053 | <i>dsbD</i> | Thiol:disulfide interchange protein dsbD | 1,27 | 1,11 | 1,62 |
| SL1054 | - | DSBA Oxidoreductase | 1,40 | 1,09 | 1,73 |
| SL1055 | - | Thioredoxin-like protein HI_1115 | 1,60 | 1,17 | 1,18 |
| SL1056 | <i>agp</i> | Glucose-1-phosphatase | 1,04 | 1,28 | 3,03 |
| SL1057 | <i>yccJ</i> | Uncharacterized protein yccJ | 1,22 | 1,18 | 1,44 |
| SL1058 | <i>wrbA</i> | Flavoprotein wrbA | 1,09 | 1,06 | 1,16 |
| SL1059 | <i>ymdF</i> | Uncharacterized protein ymdF | -1,04 | 1,56 | -1,47 |
| SL1060 | <i>rutR</i> | HTH-type transcriptional regulator rutR | 1,20 | 1,14 | 1,84 |
| SL1061 | - | Uncharacterized protein R02472 | 1,20 | 1,19 | 9,50 |
| SL1062 | <i>putA</i> | Bifunctional protein putA | 1,76 | 1,51 | 77,71 |
| SL1063 | <i>putP</i> | Sodium/proline symporter | 1,15 | -1,25 | 12,16 |
| SL1064 | <i>phoH</i> | Protein phoH | -1,56 | 1,21 | -1,69 |
| SL1065 | <i>yfeT</i> | Uncharacterized HTH-type transcriptional regulator HI_0143 | -1,09 | -1,13 | -2,08 |
| SL1066 | <i>sglT</i> | Sodium/glucose cotransporter | 1,15 | -1,18 | 6,36 |
| SL1067 | <i>nanE1</i> | Putative N-acetylmannosamine-6-phosphate 2-epimerase 1 | 1,14 | 1,00 | 4,53 |
| SL1068 | <i>nanM</i> | N-acetylneuraminate epimerase | -1,44 | -1,77 | 4,04 |
| SL1069 | <i>yiiY</i> | Uncharacterized protein yiiY | -1,43 | -1,50 | 5,40 |
| SL1070 | <i>yjhB</i> | Putative metabolite transport protein yjhB | -1,31 | -1,41 | 2,42 |
| SL1071 | <i>yjhC</i> | Uncharacterized oxidoreductase yjhC | 1,01 | 1,08 | 1,52 |
| SL1072 | <i>ghrA</i> | Glyoxylate/hydroxypyruvate reductase A | 1,21 | -1,38 | 2,06 |
| SL1073 | <i>ycdX</i> | Putative hydrolase ycdX | 1,12 | -1,10 | 1,30 |
| SL1074 | <i>ycdY</i> | Uncharacterized protein ycdY | 1,15 | -1,11 | 1,32 |
| SL1075 | <i>ycdZ</i> | Inner membrane protein ycdZ | 1,22 | 1,04 | -1,57 |
| SL1076 | <i>csgG</i> | Curli production assembly/transport component csgG | 1,28 | 1,21 | -1,42 |
| SL1077 | <i>csgF</i> | Curli production assembly/transport component csgF | 1,01 | 1,13 | 2,00 |
| SL1078 | <i>csgE</i> | Curli production assembly/transport component csgE | -1,37 | -1,06 | 1,57 |
| SL1079 | <i>csgD</i> | Probable csgAB operon transcriptional regulatory protein | -1,18 | -1,02 | 1,28 |
| SL1080 | <i>csgB</i> | Minor curlin subunit | 1,10 | 1,11 | 1,08 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL1081 | <i>csgA</i> | Major curlin subunit | 1,37 | 1,64 | 1,36 |
| SL1082 | <i>csgC</i> | Curli assembly protein csgC | -1,04 | 1,64 | 1,08 |
| SL1083 | <i>ymdA</i> | Uncharacterized protein ymdA | 1,05 | -1,09 | 3,20 |
| SL1084 | <i>ymdB</i> | UPF0189 protein ymdB | 1,09 | 1,09 | 1,79 |
| SL1085 | <i>ymdC</i> | Uncharacterized protein ymdC | -1,03 | -1,06 | -1,20 |
| SL1086 | <i>mdoC</i> | Glucans biosynthesis protein C | 1,21 | 1,22 | -2,02 |
| SL1087 | <i>mdoG</i> | Glucans biosynthesis protein G | 1,03 | -1,12 | -1,29 |
| SL1088 | <i>mdoH</i> | Glucans biosynthesis glucosyltransferase H | 1,15 | -1,14 | -1,05 |
| SL1089 | <i>yceK</i> | Uncharacterized protein yceK | 1,14 | 1,08 | 2,17 |
| SL1090 | <i>msyB</i> | Acidic protein msyB | 1,23 | 1,20 | 2,50 |
| SL1091 | <i>mdtG</i> | Multidrug resistance protein mdtG | 1,06 | -1,11 | -1,44 |
| SL1092 | <i>htrB</i> | Lipid A biosynthesis lauroyl acyltransferase | -1,04 | -1,13 | -2,37 |
| SL1093 | <i>yceA</i> | UPF0176 protein yceA | -1,02 | 1,13 | -1,00 |
| SL1094 | <i>yceI</i> | UPF0312 protein Ent638_1570 | 1,15 | 1,28 | 1,32 |
| SL1095 | <i>yceJ</i> | Cytochrome b561 homolog 2 | -1,07 | 1,07 | 1,24 |
| SL1096 | <i>yceO</i> | Hypothetical | 1,30 | -1,02 | -1,09 |
| SL1097 | <i>solA</i> | N-methyl-L-tryptophan oxidase | 1,26 | -1,10 | 1,62 |
| SL1098 | <i>bssS</i> | Biofilm regulator BssS | 1,09 | 1,49 | 1,53 |
| SL1099 | <i>dinI</i> | DNA-damage-inducible protein I | 1,04 | 1,06 | -1,08 |
| SL1100 | <i>pyrC</i> | Dihydroorotase | 1,02 | 1,00 | 1,06 |
| SL1101 | <i>yceB</i> | Uncharacterized lipoprotein yceB | -1,02 | 1,07 | -1,39 |
| SL1102 | <i>grxB</i> | Glutaredoxin-2 | 1,21 | 1,37 | 2,26 |
| SL1103 | <i>mdtH</i> | Multidrug resistance protein mdtH | 1,13 | 1,19 | -2,07 |
| SL1104 | <i>rimJ</i> | Ribosomal-protein-alanine acetyltransferase | 1,23 | 1,04 | 2,57 |
| SL1105 | <i>yceH</i> | UPF0502 protein yceH | 1,32 | 1,25 | 3,95 |
| SL1106 | <i>mviM</i> | Virulence factor mviM | 1,26 | 1,13 | 2,46 |
| SL1107 | <i>mviN</i> | Virulence factor mviN | 1,22 | 1,13 | -2,09 |
| SL1108 | <i>flgN</i> | Flagella synthesis protein flgN | -1,10 | 1,19 | -1,28 |
| SL1109 | <i>flgM</i> | Negative regulator of flagellin synthesis | 1,15 | 1,33 | 1,22 |
| SL1110 | <i>flgA</i> | Flagella basal body P-ring formation protein flgA | 1,52 | 1,11 | 3,45 |
| SL1111 | <i>flgB</i> | Flagellar basal-body rod protein flgB | -1,12 | -1,27 | 1,24 |
| SL1112 | <i>flgC</i> | Flagellar basal-body rod protein flgC | -1,06 | -1,28 | 1,31 |
| SL1113 | <i>flgD</i> | Basal-body rod modification protein flgD | -1,02 | -1,13 | 1,85 |
| SL1114 | <i>flgE</i> | Flagellar hook protein flgE | 1,02 | -1,00 | 1,79 |
| SL1115 | <i>flgF</i> | Flagellar basal-body rod protein flgF | 1,06 | -1,01 | 2,09 |
| SL1116 | <i>flgG</i> | Flagellar basal-body rod protein flgG | 1,03 | 1,01 | 2,14 |
| SL1117 | <i>flgH</i> | Flagellar L-ring protein | -1,07 | -1,21 | 1,60 |
| SL1118 | <i>flgI</i> | Flagellar P-ring protein | -1,08 | -1,21 | 1,10 |
| SL1119 | <i>flgJ</i> | Peptidoglycan hydrolase flgJ | 1,02 | -1,09 | 1,15 |
| SL1120 | <i>flgK</i> | Flagellar hook-associated protein 1 | -1,10 | 1,09 | -2,64 |
| SL1121 | <i>flgL</i> | Flagellar hook-associated protein 3 | -1,00 | 1,12 | -1,48 |
| SL1122 | <i>rne</i> | Ribonuclease E | 1,17 | -1,24 | 1,71 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-------------------|-------------------|-----------------------|
| SL1123 | <i>rluC</i> | Ribosomal large subunit pseudouridine synthase C | -1,05 | 1,01 | -1,65 |
| SL1124 | <i>yiaF</i> | Uncharacterized protein yiaF | 1,02 | 1,17 | -1,14 |
| SL1125 | - | Hypothetical | 1,18 | 1,20 | 1,18 |
| SL1126 | <i>yceF1</i> | Maf-like protein yceF 1 | 1,03 | 1,13 | 1,00 |
| SL1127 | <i>yceD</i> | Uncharacterized protein yceD | -1,09 | -1,06 | -1,86 |
| SL1128 | <i>rpmF</i> | 50S ribosomal protein L32 | -1,07 | -1,00 | -1,29 |
| SL1129 | <i>plsX</i> | Phosphate acyltransferase | -1,11 | -1,30 | -4,72 |
| SL1130 | <i>fabH</i> | 3-oxoacyl-[acyl-carrier-protein] synthase 3 | 1,17 | -1,08 | -2,12 |
| SL1131 | <i>fabD</i> | Malonyl CoA-acyl carrier protein transacylase | 1,19 | -1,15 | -1,16 |
| SL1132 | <i>fabG</i> | 3-oxoacyl-[acyl-carrier-protein] reductase | 1,04 | -1,13 | 1,11 |
| SL1133 | <i>acpP</i> | Acyl carrier protein | -1,05 | -1,10 | -1,14 |
| SL1134 | <i>fabF</i> | 3-oxoacyl-[acyl-carrier-protein] synthase 2 | 1,01 | -1,11 | -1,37 |
| SL1135 | <i>pabC</i> | Aminodeoxychorismate lyase | 1,07 | 1,05 | -1,36 |
| SL1136 | <i>yceG</i> | UPF0755 protein yceG | -1,03 | 1,08 | -1,82 |
| SL1137 | <i>tmk</i> | Thymidylate kinase | 1,04 | 1,05 | -1,68 |
| SL1138 | <i>holB</i> | DNA polymerase III subunit delta' | 1,08 | -1,07 | -1,61 |
| SL1139 | <i>ycfH</i> | Uncharacterized deoxyribonuclease ycfH | 1,21 | 1,13 | -1,00 |
| SL1140 | <i>ptsG</i> | PTS system glucose-specific EIICB component | 1,55 | 1,07 | 1,22 |
| SL1141 | <i>fhuE</i> | FhuE receptor | -1,05 | 1,73 | -1,38 |
| SL1142 | <i>hinT</i> | HIT-like protein hinT | -1,18 | -1,37 | -1,64 |
| SL1143 | <i>ycfL</i> | Uncharacterized protein ycfL | -1,26 | -1,56 | -1,81 |
| SL1144 | <i>ycfM</i> | Uncharacterized protein ycfM | -1,09 | -1,39 | -1,57 |
| SL1145 | <i>thiK</i> | Thiamine kinase | -1,06 | -1,49 | -1,77 |
| SL1146 | <i>nagZ</i> | Beta-hexosaminidase | -1,02 | -1,25 | -1,46 |
| SL1147 | <i>ycfP</i> | UPF0227 protein KPN78578_10770 | 1,03 | 1,05 | 1,22 |
| SL1148 | <i>ndh</i> | NADH dehydrogenase | 1,22 | 1,36 | -1,18 |
| SL1149 | <i>ycfJ</i> | Uncharacterized protein ycfJ | 1,11 | 1,32 | -1,57 |
| SL1150 | <i>ycfQ</i> | Uncharacterized HTH-type transcriptional regulator ycfQ | 1,08 | 1,17 | 1,09 |
| SL1151 | <i>bhsA</i> | Multiple stress resistance protein BhsA | 1,06 | 1,26 | -2,12 |
| SL1152 | <i>ycfS</i> | Probable L,D-transpeptidase YcfS | 1,30 | 1,09 | 1,35 |
| SL1153 | <i>mfd</i> | Transcription-repair-coupling factor | 1,17 | -1,08 | 1,32 |
| SL1154 | <i>lolC</i> | Lipoprotein-releasing system transmembrane protein lolC | 1,20 | 1,01 | -2,02 |
| SL1155 | <i>lolD</i> | Lipoprotein-releasing system ATP-binding protein LolD | -1,06 | -1,14 | -1,48 |
| SL1156 | <i>lolE</i> | Lipoprotein-releasing system transmembrane protein lolE | 1,08 | -1,20 | -1,28 |
| SL1157 | <i>nagK</i> | N-acetyl-D-glucosamine kinase | 1,37 | 1,05 | 1,62 |
| SL1158 | <i>npdA</i> | NAD-dependent deacetylase | 1,23 | 1,12 | 1,91 |
| SL1159 | <i>potD</i> | Spermidine/putrescine-binding periplasmic protein | -1,16 | -1,05 | 1,17 |
| SL1160 | <i>potC</i> | Spermidine/putrescine transport system permease protein potC | -1,49 | -1,06 | -2,92 |
| SL1161 | <i>sifA</i> | Secreted effector protein sifA | -15,51 | -1,07 | -3,57 |
| SL1162 | <i>potB</i> | Spermidine/putrescine transport system permease protein potB | -1,09 | -1,09 | -1,34 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-------------------|-------------------|-----------------------|
| SL1163 | <i>potA</i> | Spermidine/putrescine import ATP-binding protein PotA | -1,04 | 1,03 | -1,58 |
| SL1164 | <i>pepT</i> | Peptidase T | 1,29 | -1,08 | 1,30 |
| SL1165 | - | Hypothetical Protein SL1165 | 1,29 | 1,19 | -1,75 |
| SL1167 | <i>ycfD</i> | Uncharacterized protein ycfD | 1,03 | -1,06 | 1,14 |
| SL1168 | <i>phoQ</i> | Virulence sensor histidine kinase phoQ | -1,28 | -1,16 | -2,17 |
| SL1169 | <i>phoP</i> | Virulence transcriptional regulatory protein phoP | -1,14 | -1,01 | -1,56 |
| SL1170 | <i>purB</i> | Adenylosuccinate lyase | 1,12 | -1,02 | 1,16 |
| SL1171 | <i>hfID</i> | High frequency lysogenization protein hfID | 1,05 | -1,07 | -1,43 |
| SL1172 | <i>mnmA</i> | tRNA-specific 2-thiouridylase mnmA | 1,06 | 1,12 | -2,25 |
| SL1173 | <i>nudJ</i> | Phosphatase nudJ | 1,12 | -1,26 | -1,75 |
| SL1174 | - | Hypothetical | 1,37 | 1,07 | -1,60 |
| SL1175 | <i>rluE</i> | Ribosomal large subunit pseudouridine synthase E | 1,40 | 1,03 | -1,80 |
| SL1176 | <i>icd</i> | Isocitrate dehydrogenase [NADP] | -1,06 | -1,25 | 3,29 |
| SL1177 | - | Bacteriophage Protein | -2,96 | 1,17 | -25,20 |
| SL1178 | - | Hypothetical Protein SL1178 | -2,75 | 1,66 | -7,87 |
| SL1179 | <i>envF</i> | Probable lipoprotein envF | -1,32 | 1,19 | -2,17 |
| SL1180 | <i>msgA</i> | Virulence protein msgA | -1,13 | 1,20 | -2,85 |
| SL1181 | <i>envE</i> | Probable lipoprotein envE | -1,28 | 1,13 | -3,82 |
| SL1182 | <i>cspH</i> | Cold shock-like protein cspH | -1,05 | 1,31 | -3,33 |
| SL1183 | <i>pagD</i> | Virulence protein pagD | -2,53 | 1,62 | -6,00 |
| SL1184 | <i>pagC</i> | Virulence membrane protein pagC | -2,42 | 1,32 | -11,99 |
| SL1185 | - | Lysozyme Inhibitor | -1,19 | 1,14 | -1,75 |
| SL1186 | - | Hypothetical | -1,47 | 1,10 | -4,22 |
| SL1187 | <i>ibp</i> | Small heat shock protein ibp | 1,04 | 1,66 | 1,96 |
| SL1188 | - | Hypothetical | -1,14 | 1,37 | -1,93 |
| SL1189 | <i>yodB</i> | Cytochrome b561 homolog 1 | -1,39 | -1,02 | -2,27 |
| SL1190 | - | Outer Membrane Lipoprotein | -1,12 | -1,27 | -1,54 |
| SL1191 | <i>xp55</i> | Protein XP55 | 1,49 | -1,02 | 3,96 |
| SL1192 | <i>dppB</i> | Putative peptide transport system permease protein BMEII0209 | 1,22 | -1,42 | 2,88 |
| SL1193 | <i>nikC</i> | Putative peptide transport system permease protein BruAb2_1032 | 1,52 | 1,06 | 1,85 |
| SL1194 | <i>nikD</i> | Nickel import ATP-binding protein NikD | 1,11 | -1,20 | 2,65 |
| SL1195 | <i>potA</i> | Spermidine/putrescine import ATP-binding protein PotA | 1,03 | -1,05 | 1,79 |
| SL1196 | <i>ynl</i> | Uncharacterized mscS family protein aq_812 | -1,24 | -1,30 | -1,80 |
| SL1197 | <i>yhjQ</i> | Uncharacterized cysteine-rich protein yhjQ | -1,10 | 1,44 | 1,79 |
| SL1198 | <i>yodA</i> | Metal-binding protein yodA | 1,34 | 1,13 | 2,48 |
| SL1199 | <i>aadA</i> | Streptomycin 3"-adenylyltransferase | 1,02 | 1,06 | 1,30 |
| SL1200 | - | Response Regulator | 1,05 | 1,17 | -1,02 |
| SL1201 | <i>ycgE</i> | Uncharacterized HTH-type transcriptional regulator ycgE | -1,06 | 1,11 | -2,37 |
| SL1202 | <i>ymgB</i> | Hypothetical | 1,03 | 1,02 | 1,84 |
| SL1203 | - | Hypothetical | -1,00 | 1,12 | 1,13 |
| SL1204 | <i>aroQ</i> | Monofunctional chorismate mutase | -2,19 | 1,16 | -3,35 |
| SL1205 | <i>leuE</i> | Leucine efflux protein | -1,32 | -1,11 | -2,13 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>greA</i> vs | <i>greB</i> vs | <i>greAgreB</i> |
|--------|-------------|--|----------------|----------------|-----------------|
| | | | WT | WT | vs WT |
| SL1206 | <i>yeaR</i> | Uncharacterized protein <i>yeaR</i> | 1,24 | 1,24 | -1,18 |
| SL1207 | <i>yoaG</i> | Protein <i>yoaG</i> | -1,47 | -1,03 | 1,24 |
| SL1208 | - | Hypothetical | 1,10 | 1,10 | -1,19 |
| SL1209 | - | Hypothetical | 1,08 | 1,25 | -1,36 |
| SL1210 | <i>yeaQ</i> | UPF0410 protein <i>yeaQ</i> | 1,29 | 1,32 | 1,44 |
| SL1211 | <i>yoaF</i> | Uncharacterized protein <i>yoaF</i> | -1,24 | 1,15 | -1,61 |
| SL1212 | - | Hypothetical | -1,02 | 1,08 | -1,41 |
| SL1213 | <i>yeaO</i> | Uncharacterized protein <i>yeaO</i> | 1,29 | 1,26 | -1,15 |
| SL1214 | <i>yeaN</i> | Inner membrane transport protein <i>yeaN</i> | -1,09 | -1,08 | -1,77 |
| SL1215 | <i>yeaM</i> | Uncharacterized HTH-type transcriptional regulator <i>yeaM</i> | 1,05 | -1,07 | -1,20 |
| SL1216 | <i>yeaL</i> | UPF0756 membrane protein <i>yeaL</i> | 1,06 | -1,06 | -2,55 |
| SL1217 | <i>yeaK</i> | Uncharacterized protein <i>yeaK</i> | -1,21 | -1,22 | -2,37 |
| SL1218 | <i>yeaJ</i> | Putative diguanylate cyclase <i>YeaJ</i> | 1,01 | -1,01 | -3,03 |
| SL1219 | <i>yeaH</i> | UPF0229 protein <i>yeaH</i> | -1,03 | 1,11 | 1,74 |
| SL1220 | <i>yeaG</i> | Uncharacterized protein <i>yeaG</i> | 1,08 | 1,16 | 2,00 |
| SL1221 | <i>mipA</i> | MltA-interacting protein | -1,05 | -1,11 | -1,15 |
| SL1222 | <i>chuR</i> | Anaerobic sulfatase-maturing enzyme | -1,05 | -1,07 | -1,42 |
| SL1223 | <i>yeaE</i> | Uncharacterized protein <i>yeaE</i> | 1,11 | -1,20 | 2,25 |
| SL1224 | <i>yeaD</i> | Putative glucose-6-phosphate 1-epimerase | 1,30 | 1,15 | -1,83 |
| SL1225 | <i>gapA</i> | Glyceraldehyde-3-phosphate dehydrogenase A | 1,12 | 1,10 | 1,00 |
| SL1226 | <i>msrB</i> | Peptide methionine sulfoxide reductase <i>msrB</i> | 1,03 | -1,04 | 2,56 |
| SL1227 | <i>yeaC</i> | Uncharacterized protein <i>yeaC</i> | 1,32 | 1,05 | 3,00 |
| SL1228 | <i>pncA</i> | Pyrazinamidase/nicotinamidase | 1,14 | -1,19 | 1,79 |
| SL1229 | <i>ansA</i> | L-asparaginase 1 | 1,18 | -1,26 | 1,40 |
| SL1230 | <i>sppA</i> | Protease 4 | 1,02 | -1,38 | 1,48 |
| SL1231 | <i>ydjA</i> | Putative NAD(P)H nitroreductase <i>ydjA</i> | 1,12 | 1,02 | 2,64 |
| SL1232 | <i>selD</i> | Selenide, water dikinase | 1,11 | -1,10 | 1,53 |
| SL1233 | <i>topB</i> | DNA topoisomerase 3 | 1,03 | -1,26 | -1,14 |
| SL1234 | <i>gdhA</i> | NADP-specific glutamate dehydrogenase | -1,02 | -1,09 | 1,57 |
| SL1235 | <i>ynjH</i> | Uncharacterized protein <i>ynjH</i> | -1,26 | 1,19 | -1,56 |
| SL1236 | <i>nudG</i> | CTP pyrophosphohydrolase | -1,29 | 1,22 | -2,76 |
| SL1237 | <i>xthA</i> | Exodeoxyribonuclease III | -1,03 | -1,08 | -2,28 |
| SL1238 | <i>astC</i> | Succinylornithine transaminase | -1,30 | -1,41 | 43,62 |
| SL1239 | <i>astA</i> | Arginine N-succinyltransferase | -1,37 | -2,03 | 26,67 |
| SL1240 | <i>astD</i> | N-succinylglutamate 5-semialdehyde dehydrogenase | -1,43 | -1,74 | 23,23 |
| SL1241 | <i>astB</i> | N-succinylarginine dihydrolase | -1,35 | -1,81 | 14,27 |
| SL1242 | <i>astE</i> | Succinylglutamate desuccinylase | -1,19 | -2,02 | 8,31 |
| SL1243 | <i>spy</i> | Spheroplast protein Y | -1,08 | 1,19 | 2,21 |
| SL1244 | <i>cho</i> | Excinuclease <i>cho</i> | -1,05 | 1,06 | -1,55 |
| SL1245 | <i>nadE</i> | NH(3)-dependent NAD(+) synthetase | 1,01 | -1,08 | 1,74 |
| SL1246 | <i>osmE</i> | Osmotically-inducible lipoprotein E | 1,19 | 1,23 | 1,08 |
| SL1247 | <i>chbB</i> | N,N'-diacetylchitobiose-specific phosphotransferase enzyme IIB component | -1,10 | -1,11 | 2,05 |
| SL1248 | <i>chbC</i> | N,N'-diacetylchitobiose permease IIC component | 1,03 | -1,15 | 2,19 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-------------------|-------------------|-----------------------|
| SL1249 | <i>chbA</i> | N,N'-diacetylchitobiose-specific phosphotransferase enzyme IIA component | 1,23 | 1,14 | 1,09 |
| SL1250 | <i>chbR</i> | HTH-type transcriptional regulator chbR | 1,06 | -1,24 | -1,16 |
| SL1251 | <i>chbF</i> | 6-phospho-beta-glucosidase | 1,41 | -1,17 | 1,23 |
| SL1252 | <i>chbG</i> | UPF0249 protein chbG | 1,05 | 1,00 | 1,37 |
| SL1253 | <i>katE</i> | Catalase HPII | 1,27 | 1,20 | 1,83 |
| SL1254 | <i>cedA</i> | Cell division activator cedA | -1,16 | 1,10 | -1,03 |
| SL1255 | <i>ydjN</i> | Uncharacterized symporter ydjN | -1,04 | 1,01 | 3,28 |
| SL1256 | <i>ydjM</i> | Inner membrane protein ydjM | -1,28 | 1,00 | -1,23 |
| SL1257 | <i>yniC</i> | Phosphatase yniC | 1,13 | -1,14 | 1,05 |
| SL1258 | <i>yniB</i> | Uncharacterized protein yniB | 1,05 | 1,08 | 1,13 |
| SL1259 | <i>yniA</i> | Uncharacterized protein yniA | 1,23 | 1,38 | 3,45 |
| SL1260 | <i>ydiZ</i> | Uncharacterized protein ydiZ | 1,11 | 1,07 | 1,91 |
| SL1261 | <i>pfkB</i> | 6-phosphofructokinase isozyme 2 | 1,16 | 1,13 | 2,15 |
| SL1262 | <i>ydiY</i> | Uncharacterized protein ydiY | -1,13 | 1,09 | -3,05 |
| SL1263 | - | Hypothetical | -1,90 | -1,40 | -12,64 |
| SL1264 | - | DNA/RNA Non-Specific Endonuclease | -2,17 | 1,18 | -7,63 |
| SL1265 | <i>nucA</i> | Nuclease | -2,21 | 1,00 | -13,64 |
| SL1266 | <i>rfc</i> | O-antigen polymerase | -1,22 | 1,02 | -2,41 |
| SL1267 | <i>thrS</i> | Threonyl-tRNA synthetase | 1,18 | 1,14 | 1,17 |
| SL1268 | <i>infC</i> | Translation initiation factor IF-3 | 1,00 | -1,01 | -1,48 |
| SL1269 | <i>rplml</i> | 50S ribosomal protein L35 | 1,02 | -1,08 | -1,22 |
| SL1270 | <i>rplT</i> | 50S ribosomal protein L20 | -1,03 | -1,01 | -1,21 |
| SL1271 | <i>pheS</i> | Phenylalanyl-tRNA synthetase alpha chain | 1,13 | -1,09 | 1,09 |
| SL1272 | <i>pheT</i> | Phenylalanyl-tRNA synthetase beta chain | 1,17 | -1,02 | 1,94 |
| SL1273 | <i>ihfA</i> | Integration host factor subunit alpha | -1,07 | 1,06 | -1,02 |
| SL1274 | <i>btuC</i> | Vitamin B12 import system permease protein BtuC | 1,15 | -1,11 | -1,72 |
| SL1275 | <i>btuE</i> | Vitamin B12 transport periplasmic protein BtuE | 1,08 | -1,06 | 1,10 |
| SL1276 | <i>btuD</i> | Vitamin B12 import ATP-binding protein BtuD | 1,04 | -1,17 | 1,13 |
| SL1277 | <i>nlpC</i> | Probable lipoprotein nlpC | -1,06 | -1,08 | 1,16 |
| SL1278 | <i>cdgR</i> | Cyclic di-GMP regulator cdgR | -1,08 | 1,07 | -2,05 |
| SL1279 | <i>ydiU</i> | UPF0061 protein ydiU | 1,07 | 1,09 | 1,55 |
| SL1280 | <i>ydiE</i> | Uncharacterized protein ydiE | 1,21 | 1,48 | -1,28 |
| SL1281 | <i>aroH</i> | Phospho-2-dehydro-3-deoxyheptonate aldolase, Trp-sensitive | 1,15 | 1,01 | -1,48 |
| SL1282 | <i>ydiA</i> | Putative phosphotransferase CKO_01727 | 1,09 | -1,13 | 1,01 |
| SL1283 | <i>ppsA</i> | Phosphoenolpyruvate synthase | 1,03 | -1,18 | 4,30 |
| SL1284 | <i>fadK</i> | Short-chain-fatty-acid--CoA ligase | 1,23 | 1,08 | -1,08 |
| SL1285 | <i>ydiT</i> | Ferredoxin-like protein ydiT | 1,10 | -1,03 | -1,11 |
| SL1286 | <i>ydiS</i> | Probable electron transfer flavoprotein-quinone oxidoreductase ydiS | -1,01 | -1,04 | -1,19 |
| SL1287 | <i>ydiR</i> | Putative electron transfer flavoprotein subunit ydiR | -1,32 | 1,23 | -2,22 |
| SL1288 | <i>ydiQ</i> | Putative electron transfer flavoprotein subunit ydiQ | -1,05 | -1,16 | 1,48 |
| SL1289 | <i>ydiP</i> | Uncharacterized HTH-type transcriptional regulator ydiP | -1,33 | -1,19 | 1,27 |
| SL1290 | <i>ydiO</i> | Uncharacterized protein ydiO | 1,09 | 1,12 | 1,78 |
| SL1291 | <i>ydiF</i> | Uncharacterized protein ydiF | 1,35 | 1,01 | 4,23 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL1292 | <i>aroD</i> | 3-dehydroquinate dehydratase | 1,21 | 1,04 | 2,37 |
| SL1293 | <i>ydiB</i> | Quinate/shikimate dehydrogenase | -1,06 | -1,22 | 2,17 |
| SL1294 | <i>ydiN</i> | Inner membrane transport protein ydiN | 1,50 | 1,58 | -2,01 |
| SL1295 | <i>ydiN</i> | Inner membrane transport protein ydiN | -1,07 | -1,05 | 1,01 |
| SL1296 | <i>ydiM</i> | Inner membrane transport protein ydiM | 1,00 | 1,43 | -1,39 |
| SL1297 | <i>ydiL</i> | Uncharacterized protein ydiL | 1,38 | 1,15 | -2,44 |
| SL1298 | <i>ydiK</i> | UPF0118 inner membrane protein ydiK | 1,09 | 1,11 | 1,09 |
| SL1299 | <i>ydiJ</i> | Uncharacterized protein ydiJ | 1,10 | -1,13 | 1,24 |
| SL1300 | <i>ydiL</i> | Esterase ydil | 1,11 | -1,10 | -1,01 |
| SL1301 | <i>ydiH</i> | Uncharacterized protein ydiH | 1,19 | 1,08 | 1,10 |
| SL1302 | <i>ydjN</i> | Uncharacterized symporter ydjN | 1,07 | -1,02 | 6,96 |
| SL1303 | <i>sufA</i> | Protein sufA | 1,22 | 1,43 | 4,08 |
| SL1304 | <i>sufB</i> | FeS cluster assembly protein sufB | 1,17 | 1,13 | 2,10 |
| SL1305 | <i>sufC</i> | Probable ATP-dependent transporter sufC | 1,18 | 1,21 | 1,30 |
| SL1306 | <i>sufD</i> | FeS cluster assembly protein sufD | 1,21 | 1,07 | 1,35 |
| SL1307 | <i>sufS</i> | Cysteine desulfurase | 1,37 | 1,11 | 1,34 |
| SL1308 | <i>sufE</i> | Cysteine desulfurization protein sufE | 1,39 | 1,06 | 1,19 |
| SL1309 | <i>ynhG</i> | Probable L,D-transpeptidase YnhG | 1,25 | 1,14 | 2,90 |
| SL1310 | <i>lpp2</i> | Major outer membrane lipoprotein 2 | 1,11 | -1,10 | -1,20 |
| SL1311 | <i>lpp1</i> | Major outer membrane lipoprotein 1 | 1,08 | 1,39 | -1,48 |
| SL1312 | <i>pykF</i> | Pyruvate kinase I | 1,08 | 1,01 | -1,64 |
| SL1313 | <i>puuP</i> | Putrescine importer | -1,06 | -1,08 | 4,25 |
| SL1314 | <i>pip</i> | Proline iminopeptidase | -1,21 | -1,35 | 4,08 |
| SL1315 | - | Hypothetical | -1,21 | -1,22 | 3,97 |
| SL1316 | <i>rbsK</i> | Ribokinase | -1,13 | -1,17 | 8,68 |
| SL1317 | <i>ynfF</i> | Probable dimethyl sulfoxide reductase chain ynfF | 1,20 | 1,42 | -2,14 |
| SL1318 | - | Tetrathionate Reductase Subunit C | 1,05 | 1,47 | -2,98 |
| SL1319 | <i>nrfC</i> | Protein nrfC | 1,01 | 1,19 | -2,70 |
| SL1320 | <i>fixL</i> | Sensor protein fixL | 1,42 | 1,12 | 2,21 |
| SL1321 | <i>fixJ</i> | Transcriptional regulatory protein fixJ | 1,43 | -1,07 | 1,20 |
| SL1322 | <i>ydhZ</i> | Uncharacterized protein ydhZ | 1,52 | -1,03 | -1,02 |
| SL1323 | <i>ybgA</i> | Uncharacterized protein ybgA | 1,18 | 1,12 | 2,23 |
| SL1324 | <i>mIrA</i> | HTH-type transcriptional regulator mIrA | -1,84 | -1,14 | -2,75 |
| SL1325 | <i>ssrB</i> | putative two-component response regulator | -2,38 | 1,26 | -2,58 |
| SL1326 | <i>spiR</i> | Sensor kinase protein | -3,42 | -1,01 | -2,56 |
| SL1327 | <i>spiC</i> | Salmonella pathogenicity island protein C | -7,40 | 1,89 | -7,03 |
| SL1328 | <i>yscC</i> | Yop proteins translocation protein C | -8,81 | 1,31 | -6,06 |
| SL1329 | - | Type-III Secretion Protein | -5,18 | -1,04 | -7,92 |
| SL1330 | - | Secretion System Protein | -4,91 | 1,17 | -4,88 |
| SL1331 | <i>sseA</i> | Type III secretion system chaperone sseA | -7,73 | 1,49 | -3,08 |
| SL1332 | <i>sseB</i> | Secreted effector protein sseB | -6,60 | 1,31 | -2,69 |
| SL1333 | - | Type III Secretion Low Calcium Response Chaperone LcrH/SycD | -5,68 | 1,13 | -2,44 |
| SL1334 | <i>sseC</i> | Secreted effector protein sseC | -6,74 | 1,15 | -2,37 |
| SL1335 | <i>sseD</i> | Secreted effector protein sseD | -5,29 | 1,33 | -1,44 |
| SL1336 | <i>sseE</i> | Secreted Effector Protein | -4,59 | 1,21 | -1,28 |
| SL1337 | <i>sscB</i> | Type III Secretion Chaperone | -5,73 | 1,14 | -1,55 |
| SL1338 | <i>sseF</i> | Hypothetical | -2,64 | -1,03 | -1,30 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL1339 | <i>sseG</i> | Hypothetical | -2,53 | -1,17 | -1,36 |
| SL1340 | <i>ssaG</i> | Secretion System Apparatus SsaG | -4,80 | 1,60 | -1,67 |
| SL1341 | - | Hypothetical | -14,29 | 1,75 | -18,14 |
| SL1342 | - | Type III Secretion System Apparatus Protein | -14,52 | 1,76 | -22,27 |
| SL1343 | <i>ssaJ</i> | Secretion system apparatus lipoprotein <i>ssaJ</i> | -15,99 | 1,46 | -17,00 |
| SL1344 | - | Type III Secretion Apparatus | -11,83 | 1,31 | -16,48 |
| SL1345 | <i>ssaK</i> | Secretion system apparatus protein <i>ssaK</i> | -11,43 | 1,32 | -11,64 |
| SL1346 | <i>ssaL</i> | Secretion system apparatus protein <i>ssaL</i> | -8,55 | 1,37 | -5,60 |
| SL1347 | <i>ssaM</i> | Secretion system apparatus protein <i>ssaM</i> | -8,23 | 1,24 | -5,75 |
| SL1348 | <i>ssaV</i> | Secretion system apparatus protein <i>ssaV</i> | -2,98 | 1,24 | -1,41 |
| SL1349 | <i>ssaN</i> | Probable secretion system apparatus ATP synthase <i>ssaN</i> | -3,19 | 1,27 | 1,14 |
| SL1350 | <i>ssaO</i> | Secretion system apparatus protein <i>ssaO</i> | -3,52 | 1,44 | 1,32 |
| SL1351 | <i>ssaP</i> | Secretion system apparatus protein <i>ssaP</i> | -2,62 | 1,21 | -1,05 |
| SL1352 | <i>ssaQ</i> | Secretion system apparatus protein <i>SsaQ</i> | -2,23 | 1,24 | 1,11 |
| SL1353 | <i>pscR</i> | Virulence protein <i>pscR</i> | -8,10 | 1,79 | -4,01 |
| SL1354 | <i>ssaS</i> | Secretion system apparatus protein <i>SsaS</i> | -11,20 | 1,36 | -6,62 |
| SL1355 | <i>ssaT</i> | Secretion system apparatus protein <i>ssaT</i> | -4,96 | 1,26 | -4,28 |
| SL1356 | <i>ssaU</i> | Secretion system apparatus protein <i>ssaU</i> | -1,39 | -1,02 | -1,11 |
| SL1357 | <i>mdtK</i> | Multidrug resistance protein <i>mdtK</i> | 1,00 | -1,11 | -1,19 |
| SL1358 | <i>ribE</i> | Riboflavin synthase alpha chain | -1,24 | 1,07 | -1,46 |
| SL1359 | <i>cfa</i> | Cyclopropane-fatty-acyl-phospholipid synthase | 1,03 | 1,04 | -1,59 |
| SL1360 | <i>ydhC</i> | Inner membrane transport protein <i>ydhC</i> | -1,19 | -1,07 | -24,59 |
| SL1361 | <i>ydhB</i> | Uncharacterized HTH-type transcriptional regulator <i>ydhB</i> | 1,03 | 1,02 | 1,34 |
| SL1362 | <i>purR</i> | HTH-type transcriptional repressor <i>purR</i> | 1,16 | 1,15 | -1,81 |
| SL1363 | <i>sodB</i> | Superoxide dismutase [Fe] | 1,20 | 1,31 | 1,63 |
| SL1364 | <i>ydhO</i> | Uncharacterized protein <i>ydhO</i> | -1,19 | 1,04 | -2,16 |
| SL1365 | <i>grxD</i> | Glutaredoxin-4 | -1,08 | -1,05 | 1,16 |
| SL1366 | <i>rnt</i> | Ribonuclease T | 1,06 | -1,20 | -2,27 |
| SL1367 | <i>gloA</i> | Lactoylglutathione lyase | 1,09 | -1,05 | -1,06 |
| SL1368 | <i>nemA</i> | N-ethylmaleimide reductase | 1,06 | 1,12 | 1,46 |
| SL1369 | <i>nemR</i> | HTH-type transcriptional repressor <i>nemR</i> | -1,03 | -1,24 | -1,51 |
| SL1370 | <i>ydhL</i> | Uncharacterized protein <i>ydhL</i> | -1,06 | 1,12 | -1,08 |
| SL1371 | <i>ydhF</i> | Oxidoreductase <i>ydhF</i> | 1,35 | 1,11 | 1,92 |
| SL1372 | <i>sodC</i> | Superoxide dismutase [Cu-Zn] 2 | 1,22 | 1,35 | 1,30 |
| SL1373 | <i>ydhK</i> | Uncharacterized transporter <i>ydhK</i> | 1,15 | 1,14 | -1,20 |
| SL1374 | <i>ydhJ</i> | Uncharacterized protein <i>ydhJ</i> | 1,02 | 1,16 | -1,76 |
| SL1375 | <i>ydhI</i> | Uncharacterized protein <i>ydhI</i> | 1,10 | 1,20 | -1,70 |
| SL1376 | <i>slyA</i> | Transcriptional regulator <i>slyA</i> | -1,20 | 1,17 | -2,26 |
| SL1377 | <i>slyB</i> | Outer membrane lipoprotein <i>slyB</i> | 1,10 | 1,19 | 1,38 |
| SL1378 | <i>anmK</i> | Anhydro-N-acetyl muramic acid kinase | 1,04 | 1,03 | 1,05 |
| SL1379 | <i>mliC</i> | Membrane-bound lysozyme inhibitor of C-type lysozyme | 1,05 | 1,19 | -1,71 |
| SL1380 | <i>pdxH</i> | Pyridoxine/pyridoxamine 5'-phosphate oxidase | 1,10 | 1,04 | -2,30 |
| SL1381 | <i>tyrS</i> | Tyrosyl-tRNA synthetase | 1,03 | 1,01 | -1,82 |
| SL1382 | <i>pdxY</i> | Pyridoxamine kinase | -1,08 | -1,37 | -1,63 |
| SL1383 | <i>gst</i> | Glutathione S-transferase | 1,30 | 1,18 | 2,14 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL1384 | <i>dtpA</i> | Dipeptide and tripeptide permease A | -1,18 | 1,13 | -1,29 |
| SL1385 | <i>nth</i> | Endonuclease III | 1,21 | 1,33 | 1,16 |
| SL1386 | <i>rnfE</i> | Electron transport complex protein rnfE | 1,27 | 1,25 | 1,50 |
| SL1387 | <i>rnfG</i> | Electron transport complex protein rnfG | 1,53 | 1,36 | 1,41 |
| SL1388 | <i>rnfD</i> | Electron transport complex protein rnfD | 1,52 | 1,14 | -1,07 |
| SL1389 | <i>rnfC</i> | Electron transport complex protein rnfC | 1,50 | 1,10 | -1,42 |
| SL1390 | <i>rnfB</i> | Electron transport complex protein rnfB | 1,25 | 1,05 | -1,58 |
| SL1391 | <i>rnfA</i> | Electron transport complex protein rnfA | 1,23 | 1,06 | -2,32 |
| SL1392 | <i>ydgK</i> | Inner membrane protein ydgK | -1,11 | -1,15 | -2,54 |
| SL1393 | <i>cnu</i> | OriC-binding nucleoid-associated protein | -1,19 | 1,07 | -2,33 |
| SL1394 | <i>ydgJ</i> | Uncharacterized oxidoreductase ydgJ | 1,06 | 1,02 | 1,50 |
| SL1395 | <i>add</i> | Adenosine deaminase | -2,04 | 1,21 | -2,80 |
| SL1396 | <i>ydgA</i> | Protein ydgA | 1,12 | 1,02 | 1,21 |
| SL1397 | <i>manA</i> | Mannose-6-phosphate isomerase | 1,01 | -1,07 | -1,44 |
| SL1398 | <i>fumA</i> | Fumarate hydratase class I, aerobic | 1,13 | -1,26 | 5,66 |
| SL1399 | - | Hypothetical Protein SL1399 | 1,53 | 1,02 | 7,56 |
| SL1400 | <i>fumC</i> | Fumarate hydratase class II | 1,16 | 1,05 | 4,75 |
| SL1401 | <i>tus</i> | DNA replication terminus site-binding protein | 1,35 | 1,09 | 3,56 |
| SL1402 | <i>rstB</i> | Sensor protein rstB | 1,05 | -1,08 | -1,68 |
| SL1403 | <i>aepA</i> | Exoenzymes regulatory protein AepA | 1,09 | 1,15 | 1,51 |
| SL1404 | <i>ompS2</i> | Outer membrane protein S2 | -1,25 | 1,15 | 2,01 |
| SL1405 | <i>rstA</i> | Transcriptional regulatory protein rstA | -1,14 | 1,08 | -3,50 |
| SL1406 | <i>ydgC</i> | Inner membrane protein ydgC | 1,20 | 1,03 | -1,29 |
| SL1407 | <i>ydgI</i> | Putative arginine/ornithine antiporter | 1,13 | 1,02 | -1,11 |
| SL1408 | <i>ydgH</i> | Protein ydgH | -1,04 | -1,11 | -1,15 |
| SL1409 | <i>pntA</i> | NAD(P) transhydrogenase subunit alpha | 1,20 | -1,04 | 1,42 |
| SL1410 | <i>pntB</i> | NAD(P) transhydrogenase subunit beta | 1,15 | -1,13 | 1,41 |
| SL1411 | <i>tqsA</i> | AI-2 transport protein tqsA | -1,07 | -1,09 | -1,44 |
| SL1412 | <i>mdtJ</i> | Spermidine export protein mdtJ | 1,12 | -1,40 | 1,69 |
| SL1413 | <i>mdtl</i> | Spermidine export protein mdtl | 1,25 | -1,34 | 1,89 |
| SL1414 | <i>ydgD</i> | Uncharacterized serine protease ydgD | 1,06 | 1,04 | 2,11 |
| SL1415 | <i>asr</i> | Acid shock protein | -1,07 | 1,37 | -1,04 |
| SL1416 | <i>ynfM</i> | Inner membrane transport protein ynfM | 1,05 | 1,24 | -1,69 |
| SL1417 | <i>ynfL</i> | Uncharacterized HTH-type transcriptional regulator ynfL | 1,01 | -1,11 | -1,02 |
| SL1418 | <i>mlc</i> | Protein mlc | 1,28 | 1,06 | 1,71 |
| SL1419 | <i>ynfK</i> | Putative dethiobiotin synthetase | 1,30 | 1,20 | -1,52 |
| SL1420 | <i>clcB</i> | Voltage-gated CIC-type chloride channel clcB | 1,53 | 1,23 | -1,29 |
| SL1421 | <i>opuBA</i> | Choline transport ATP-binding protein opuBA | 1,03 | 1,04 | 2,73 |
| SL1422 | <i>opuCB</i> | Glycine betaine/carnitine/choline transport system permease protein opuCB | 1,01 | -1,06 | 3,34 |
| SL1423 | <i>opuCC</i> | Glycine betaine/carnitine/choline-binding protein | 1,02 | -1,08 | 4,59 |
| SL1424 | <i>opuCB</i> | Glycine betaine/carnitine/choline transport system permease protein opuCB | -1,00 | -1,03 | 3,48 |
| SL1425 | <i>dmsD</i> | Twin-arginine leader-binding protein dmsD | 1,18 | -1,01 | -2,00 |
| SL1426 | <i>ynfH</i> | Anaerobic dimethyl sulfoxide reductase chain ynfH | 1,19 | 1,02 | -1,54 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-------------------|-------------------|-----------------------|
| SL1427 | <i>dmsB</i> | Anaerobic dimethyl sulfoxide reductase chain B | -1,12 | -1,19 | -1,19 |
| SL1428 | <i>ynfF</i> | Probable dimethyl sulfoxide reductase chain <i>ynfF</i> | 1,52 | 1,15 | -1,23 |
| SL1429 | <i>ynfE</i> | Putative dimethyl sulfoxide reductase chain <i>ynfE</i> | 1,13 | 1,33 | 1,31 |
| SL1430 | <i>ynfD</i> | Uncharacterized protein <i>ynfD</i> | 1,28 | 1,31 | 1,63 |
| SL1431 | <i>ynfC</i> | UPF0257 lipoprotein <i>ynfC</i> | 1,15 | 1,12 | 1,59 |
| SL1432 | <i>speG</i> | Spermidine N(1)-acetyltransferase | 1,09 | 1,05 | 1,42 |
| SL1433 | <i>ynfB</i> | UPF0482 protein CKO_01577 | 1,12 | 1,17 | 1,43 |
| SL1434 | <i>ynfA</i> | UPF0060 membrane protein <i>ynfA</i> | -1,59 | -1,09 | -1,97 |
| SL1435 | <i>rspA</i> | Starvation-sensing protein <i>rspA</i> | -1,55 | -1,73 | 7,90 |
| SL1436 | <i>rspB</i> | Starvation-sensing protein <i>rspB</i> | -1,23 | -1,45 | 8,06 |
| SL1437 | <i>ydfJ</i> | Putative inner membrane metabolite transport protein <i>ydfJ</i> | -1,19 | -1,35 | 4,11 |
| SL1438 | <i>ydfI</i> | Uncharacterized oxidoreductase <i>ydfI</i> | -1,01 | -1,14 | 1,44 |
| SL1439 | <i>ydfZ</i> | Putative selenoprotein <i>ydfZ</i> | 1,13 | 1,61 | 1,39 |
| SL1440 | <i>ydfH</i> | Uncharacterized HTH-type transcriptional regulator <i>ydfH</i> | 1,01 | -1,36 | -1,42 |
| SL1441 | <i>ydfG</i> | NADP-dependent L-serine/L-allo-threonine dehydrogenase <i>ydfG</i> | 1,11 | -1,09 | 1,39 |
| SL1442 | <i>dcp</i> | Peptidyl-dipeptidase <i>dcp</i> | 1,15 | 1,05 | 1,40 |
| SL1443 | <i>ymdF</i> | Uncharacterized protein <i>ymdF</i> | -1,27 | 1,29 | -2,06 |
| SL1444 | <i>ydeJ</i> | Protein <i>ydeJ</i> | -1,13 | 1,04 | -1,03 |
| SL1445 | <i>ydeI</i> | Uncharacterized protein <i>ydeI</i> | -1,08 | 1,40 | -1,44 |
| SL1446 | <i>ydeE</i> | Uncharacterized MFS-type transporter <i>ydeE</i> | 1,09 | -1,09 | -1,13 |
| SL1447 | <i>eamA</i> | Probable amino-acid metabolite efflux pump | -1,31 | -1,18 | -1,04 |
| SL1448 | <i>marB</i> | Multiple antibiotic resistance protein <i>marB</i> | -1,04 | 1,14 | -1,08 |
| SL1449 | <i>marA</i> | Multiple antibiotic resistance protein <i>marA</i> | -1,05 | -1,22 | 1,05 |
| SL1450 | <i>marR</i> | Multiple antibiotic resistance protein <i>marR</i> | -1,05 | -1,20 | -1,09 |
| SL1451 | <i>marC</i> | UPF0056 inner membrane protein <i>marC</i> | -1,01 | 1,17 | -1,80 |
| SL1452 | <i>sotB</i> | Probable sugar efflux transporter | 1,14 | 1,36 | -3,01 |
| SL1453 | <i>yneJ</i> | Uncharacterized HTH-type transcriptional regulator <i>yneJ</i> | -1,00 | 1,02 | -1,03 |
| SL1454 | <i>yneI</i> | Aldehyde dehydrogenase-like protein <i>yneI</i> | -1,03 | 1,04 | -2,65 |
| SL1455 | <i>glsA2</i> | Glutaminase 2 | 1,01 | -1,08 | -2,29 |
| SL1456 | <i>yneG</i> | Uncharacterized protein <i>yneG</i> | 1,13 | 1,05 | -1,35 |
| SL1457 | <i>yneE</i> | UPF0187 protein <i>yneE</i> | -1,08 | 1,01 | -2,75 |
| SL1458 | - | Hypothetical | -1,09 | -1,02 | 1,19 |
| SL1459 | <i>ompC</i> | Outer membrane protein C | -1,17 | 1,00 | 2,18 |
| SL1460 | <i>hypA</i> | Hydrogenase nickel incorporation protein <i>hypA</i> | -1,33 | -1,20 | -1,28 |
| SL1461 | - | Hypothetical | -1,40 | -1,53 | -1,55 |
| SL1462 | <i>hoxQ</i> | Hydrogenase expression/formation protein <i>hoxQ</i> | -1,27 | -1,50 | -1,20 |
| SL1463 | <i>hyaE</i> | Hydrogenase-1 operon protein <i>hyaE</i> | -1,32 | -1,31 | 1,16 |
| SL1464 | <i>hupF</i> | Hydrogenase expression/formation protein <i>hupF</i> | -1,30 | -1,26 | 1,23 |
| SL1465 | <i>hoxM</i> | Hydrogenase expression/formation protein <i>hoxM</i> | -1,27 | -1,14 | 1,27 |
| SL1466 | <i>hupZ</i> | Probable Ni/Fe-hydrogenase B-type cytochrome subunit | -1,22 | -1,24 | 2,79 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL1467 | <i>hupB</i> | Uptake hydrogenase large subunit | -1,17 | -1,17 | 3,66 |
| SL1468 | <i>hoxK</i> | Uptake hydrogenase small subunit | -1,12 | -1,13 | 2,86 |
| SL1469 | <i>cbh</i> | Choloylglycine hydrolase | -1,26 | 1,27 | -1,26 |
| SL1470 | <i>uxuR</i> | Uxu operon transcriptional regulator | -1,07 | -1,05 | 1,17 |
| SL1471 | <i>rspB</i> | Uncharacterized zinc-type alcohol dehydrogenase-like protein HI_0053 | -1,46 | -1,07 | 2,30 |
| SL1472 | <i>exuT</i> | Hexuronate transporter | -1,63 | -1,16 | 3,48 |
| SL1473 | - | Hypothetical | -2,52 | 1,11 | -3,72 |
| SL1474 | <i>tetA</i> | Tetracycline resistance protein, class G | -1,36 | -1,40 | 1,83 |
| SL1475 | <i>yhjG</i> | Uncharacterized aromatic compound monooxygenase yhjG | -1,14 | -1,35 | 3,46 |
| SL1476 | - | MarR Family Transcriptional Regulator | -1,08 | -1,08 | 2,15 |
| SL1477 | <i>queA</i> | S-adenosylmethionine:tRNA ribosyltransferase-isomerase | -1,49 | 1,25 | -1,99 |
| SL1478 | <i>yjgH</i> | UPF0076 protein yjgH | 1,25 | 1,32 | -1,10 |
| SL1479 | <i>relE</i> | Toxin relE | -1,04 | -1,11 | -1,51 |
| SL1480 | - | Hypothetical | -1,32 | -1,13 | -1,09 |
| SL1481 | - | Hypothetical | 1,23 | 1,09 | 1,77 |
| SL1482 | - | Cytoplasmic Protein | -1,07 | -1,00 | 1,66 |
| SL1483 | - | Putative transposase y4bF | 1,14 | -1,09 | -1,02 |
| SL1484 | - | Coiled-Coil Protein | -1,18 | -2,93 | -1,44 |
| SL1485 | <i>galS</i> | HTH-type transcriptional regulator galS | 1,22 | -1,83 | -1,18 |
| SL1486 | - | Uncharacterized Na(+)/H(+) antiporter HI_1107 | 1,17 | -1,49 | 2,21 |
| SL1487 | <i>patB</i> | Cystathionine beta-lyase patB | 1,36 | -1,26 | 1,52 |
| SL1488 | <i>glgX</i> | Glycogen operon protein glgX homolog | 1,22 | 1,24 | 1,63 |
| SL1489 | <i>treY</i> | Maltooligosyl trehalose synthase | 1,42 | 1,24 | 3,14 |
| SL1490 | <i>treZ</i> | Malto-oligosyltrehalose trehalohydrolase | 1,24 | 1,06 | 1,87 |
| SL1491 | - | Hypothetical | 1,20 | -1,00 | 1,29 |
| SL1492 | <i>hdeB</i> | Protein hdeB | -1,07 | -1,02 | -1,20 |
| SL1493 | <i>osmC</i> | Peroxiredoxin osmC | 1,09 | 1,24 | 1,01 |
| SL1494 | <i>bdm</i> | Protein bdm homolog | -1,04 | 1,05 | -4,02 |
| SL1495 | <i>sra</i> | Stationary-phase-induced ribosome-associated protein | 1,24 | 1,25 | -1,76 |
| SL1496 | <i>sfcA</i> | NAD-dependent malic enzyme | 1,20 | -1,33 | 2,28 |
| SL1497 | <i>adhP</i> | Alcohol dehydrogenase, propanol-preferring | 1,09 | 1,40 | 1,35 |
| SL1498 | <i>fdnl</i> | Formate dehydrogenase, nitrate-inducible, cytochrome b556(fdn) subunit | 1,08 | 1,10 | -1,34 |
| SL1499 | <i>fdnH</i> | Formate dehydrogenase, nitrate-inducible, iron-sulfur subunit | 1,04 | -1,07 | -1,09 |
| SL1500 | <i>fdnG</i> | Formate dehydrogenase, nitrate-inducible, major subunit | -1,04 | -1,46 | -1,19 |
| SL1501 | <i>fdnG</i> | Formate dehydrogenase, nitrate-inducible, major subunit | -1,29 | -2,04 | 1,12 |
| SL1502 | <i>yddG</i> | Inner membrane protein yddG | -1,10 | -1,14 | -1,55 |
| SL1503 | <i>ompD</i> | Outer membrane porin protein ompD | -1,00 | -1,04 | 1,09 |
| SL1504 | - | Glutathione-Dependent Formaldehyde-Activating GFA | 1,21 | -1,06 | 1,03 |
| SL1505 | <i>smvA</i> | Methyl viologen resistance protein smvA | -1,22 | -1,29 | -2,99 |
| SL1506 | - | TetR Family Transcriptional Regulator | 1,03 | 1,07 | -1,02 |
| SL1507 | <i>narU</i> | Nitrite extrusion protein 2 | 1,27 | 1,03 | 11,11 |
| SL1508 | <i>narZ</i> | Respiratory nitrate reductase 2 alpha chain | 1,02 | 1,04 | 6,46 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-----------------------|-----------------------|---------------------------|
| SL1509 | <i>narY</i> | Respiratory nitrate reductase 2 beta chain | -1,04 | 1,09 | 5,04 |
| SL1510 | <i>narW</i> | Probable nitrate reductase molybdenum cofactor assembly chaperone NarW | 1,11 | 1,04 | 4,15 |
| SL1511 | <i>narV</i> | Respiratory nitrate reductase 2 gamma chain | 1,08 | 1,07 | 4,38 |
| SL1512 | <i>yddE</i> | Uncharacterized isomerase yddE | 1,06 | -1,16 | 1,27 |
| SL1513 | <i>nhoA</i> | N-hydroxyarylamine O-acetyltransferase | -1,08 | -1,04 | -2,40 |
| SL1514 | <i>steA</i> | Secreted effector protein steA | -1,31 | 1,49 | -1,37 |
| SL1515 | <i>ansP</i> | L-asparagine permease | 1,18 | 1,17 | 1,56 |
| SL1516 | <i>ygdR</i> | Uncharacterized lipoprotein ygdR | 1,22 | 1,30 | 1,44 |
| SL1517 | <i>yncE</i> | Uncharacterized protein YncE | -1,02 | 1,25 | -1,12 |
| SL1518 | <i>yncD</i> | Probable tonB-dependent receptor yncD | 1,00 | -1,27 | 1,97 |
| SL1519 | <i>mcbR</i> | HTH-type transcriptional regulator mcbR | -1,07 | -1,28 | 1,04 |
| SL1520 | <i>yncB</i> | Putative NADP-dependent oxidoreductase yncB | 1,13 | -1,03 | 1,34 |
| SL1521 | <i>yncA</i> | Uncharacterized N-acetyltransferase yncA | 1,17 | -1,01 | 1,85 |
| SL1522 | <i>ydcZ</i> | Inner membrane protein ydcZ | 1,28 | 1,03 | 1,40 |
| SL1523 | <i>ydcY</i> | Uncharacterized protein ydcY | 1,08 | 1,20 | 1,61 |
| SL1524 | - | Hypothetical | 1,17 | -1,37 | 1,75 |
| SL1525 | - | Virulence Protein SrfB | 1,49 | -1,02 | 4,34 |
| SL1526 | - | Virulence Factor | 1,42 | -1,05 | 2,39 |
| SL1527 | <i>ydcX</i> | Uncharacterized protein ydcX | 1,40 | -1,13 | 1,79 |
| SL1528 | <i>ydcW</i> | Gamma-aminobutyraldehyde dehydrogenase | 1,09 | 1,11 | 2,33 |
| SL1529 | <i>ydcR</i> | Uncharacterized HTH-type transcriptional regulator ydcR | -1,16 | -1,03 | -1,20 |
| SL1530 | <i>vanX</i> | D-alanyl-D-alanine dipeptidase | -1,40 | 1,07 | -1,39 |
| SL1531 | - | D-Alanyl-D-Alanine Dipeptidase | -2,42 | 1,47 | -4,95 |
| SL1532 | <i>sifB</i> | Secreted effector protein sifB | -6,21 | 1,85 | -3,28 |
| SL1533 | <i>yncJ</i> | Uncharacterized protein yncJ | -4,14 | 1,63 | -2,28 |
| SL1534 | <i>ydcP</i> | Uncharacterized protease ydcP | -1,07 | 1,06 | -1,39 |
| SL1535 | <i>ydcN</i> | Uncharacterized HTH-type transcriptional regulator ydcN | 1,34 | 1,05 | 1,50 |
| SL1536 | <i>ydcO</i> | Inner membrane protein ydcO | 1,28 | -1,18 | 1,53 |
| SL1537 | <i>ydcL</i> | Uncharacterized lipoprotein ydcL | 1,44 | -1,04 | 2,52 |
| SL1538 | <i>tehB</i> | Tellurite resistance protein tehB | 1,27 | 1,03 | 1,79 |
| SL1539 | <i>tehA</i> | Tellurite resistance protein tehA | 1,28 | -1,12 | -1,02 |
| SL1540 | <i>ydcK</i> | Uncharacterized acetyltransferase ydcK | 1,13 | -1,14 | 2,24 |
| SL1541 | <i>rimL</i> | Ribosomal-protein-serine acetyltransferase | 1,16 | 1,11 | 2,07 |
| SL1542 | <i>sgcX</i> | Putative aminopeptidase sgcX | 1,37 | 1,22 | 2,48 |
| SL1543 | <i>sgcB</i> | Putative phosphotransferase enzyme IIB component sgcB | 1,16 | 1,24 | 2,02 |
| SL1544 | <i>sgcC</i> | Putative permease IIC component | 1,24 | 1,20 | 2,09 |
| SL1545 | <i>sgcQ</i> | Putative sgc region protein sgcQ | 1,06 | 1,05 | 1,32 |
| SL1546 | <i>sgcA</i> | Putative phosphotransferase IIA component sgcA | 1,29 | 1,10 | 1,68 |
| SL1547 | <i>sgcE</i> | Protein sgcE | 1,20 | -1,01 | 1,40 |
| SL1548 | <i>sgcR</i> | Putative sgc region transcriptional regulator | 1,14 | -1,12 | 1,02 |
| SL1549 | <i>aacA7</i> | Aminoglycoside N(6')-acetyltransferase type 1 | 1,13 | 1,33 | -1,22 |
| SL1550 | <i>lldD</i> | Lactate 2-monooxygenase | -1,01 | -1,24 | 1,85 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL1551 | <i>yceI</i> | UPF0312 protein VPA0850 | 1,36 | 1,06 | 2,34 |
| SL1552 | <i>mdoD</i> | Glucans biosynthesis protein D | 1,26 | -1,10 | 1,48 |
| SL1553 | <i>pnbA</i> | Para-nitrobenzyl esterase | 1,36 | -1,32 | 3,07 |
| SL1554 | <i>ydcJ</i> | Uncharacterized protein ydcJ | 1,30 | 1,10 | 9,60 |
| SL1555 | <i>ydcI</i> | Uncharacterized HTH-type transcriptional regulator ydcI | 1,03 | 1,07 | 1,83 |
| SL1556 | <i>trg</i> | Methyl-accepting chemotaxis protein III | -1,26 | -1,37 | 1,17 |
| SL1557 | <i>frmA</i> | S-(hydroxymethyl)glutathione dehydrogenase | 1,23 | 1,06 | 1,77 |
| SL1558 | <i>yaiN</i> | Uncharacterized protein in bioA 5'region | 1,03 | -1,11 | 1,18 |
| SL1559 | <i>steB</i> | Secreted effector protein steB | -1,78 | 1,43 | -16,75 |
| SL1560 | <i>tfpB</i> | Protein tfpB | -1,29 | 1,88 | -2,37 |
| SL1561 | <i>sseJ</i> | Secreted effector protein sseJ | -4,43 | 1,67 | -2,52 |
| SL1562 | - | Hypothetical | -1,22 | 1,44 | -2,15 |
| SL1563 | <i>fliY</i> | Cystine-binding periplasmic protein | -1,39 | 1,05 | -1,92 |
| SL1564 | <i>yecS</i> | Inner membrane amino-acid ABC transporter permease protein yecS | -1,20 | 1,15 | -2,41 |
| SL1565 | <i>glnQ</i> | Glutamine transport ATP-binding protein glnQ | -1,24 | 1,22 | -1,18 |
| SL1566 | <i>yecS</i> | Inner membrane amino-acid ABC transporter permease protein yecS | -1,06 | 1,32 | -1,18 |
| SL1567 | - | Hypothetical | -1,43 | 1,20 | -1,98 |
| SL1568 | <i>ybcY</i> | Putative uncharacterized protein ybcY | -1,17 | -1,95 | 1,04 |
| SL1569 | <i>cybB</i> | Cytochrome b561 | 1,09 | 1,03 | 1,10 |
| SL1570 | <i>ydcF</i> | Protein ydcF | 1,23 | 1,09 | 2,05 |
| SL1571 | <i>hrpA</i> | ATP-dependent RNA helicase hrpA | 1,32 | 1,02 | 1,78 |
| SL1572 | <i>azor</i> | FMN-dependent NADH-azoreductase | 1,13 | 1,01 | -1,67 |
| SL1573 | - | Glutathione-Dependent Formaldehyde-Activating GFA | 1,15 | 1,18 | -1,38 |
| SL1574 | <i>ydbL</i> | Uncharacterized protein ydbL | 1,33 | 1,15 | -1,40 |
| SL1575 | <i>ynbE</i> | Uncharacterized protein ynbE | 1,29 | 1,09 | -1,46 |
| SL1576 | <i>ydbH</i> | Uncharacterized protein ydbH | 1,18 | 1,16 | -1,21 |
| SL1577 | <i>ldhA</i> | D-lactate dehydrogenase | 1,24 | 1,35 | -1,30 |
| SL1578 | <i>hsrJ</i> | Heat shock protein hsrJ | 1,22 | 1,18 | -2,04 |
| SL1579 | <i>ydbJ</i> | Uncharacterized protein ydbJ | 1,09 | 1,09 | -1,02 |
| SL1580 | - | Hypothetical | 1,03 | 1,12 | 1,02 |
| SL1581 | <i>ydbK</i> | Probable pyruvate-flavodoxin oxidoreductase | 1,39 | 1,16 | 1,69 |
| SL1582 | <i>uspF</i> | Universal stress protein F | 1,10 | 1,34 | 2,66 |
| SL1583 | <i>emrE</i> | Multidrug transporter emrE | 1,24 | -1,21 | 1,36 |
| SL1584 | <i>intR</i> | Putative lambdoid prophage Rac integrase | 1,27 | 1,20 | -1,05 |
| SL1585 | <i>ttcA</i> | tRNA 2-thiocytidine biosynthesis protein TtcA | -1,16 | -1,22 | -1,78 |
| SL1586 | <i>dbpA</i> | ATP-independent RNA helicase dbpA | -1,03 | -1,02 | -1,26 |
| SL1587 | <i>zntB</i> | Zinc transport protein zntB | 1,20 | 1,22 | 1,00 |
| SL1588 | <i>tap</i> | Methyl-accepting chemotaxis protein IV | 1,11 | 1,23 | -1,08 |
| SL1589 | <i>ydaL</i> | Uncharacterized protein ydaL | -1,12 | -1,09 | 1,39 |
| SL1590 | <i>ogt</i> | Methylated-DNA--protein-cysteine methyltransferase | -1,00 | 1,18 | 1,49 |
| SL1591 | <i>fnr</i> | Fumarate and nitrate reduction regulatory protein | 1,03 | 1,12 | -1,38 |
| SL1592 | <i>uspE</i> | Universal stress protein E | 1,17 | 1,34 | 2,28 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>greA</i> vs | <i>greB</i> vs | <i>greAgreB</i> |
|--------|-------------|---|----------------|----------------|-----------------|
| | | | WT | WT | vs WT |
| SL1593 | <i>ynaJ</i> | Uncharacterized protein ynaJ | 1,25 | 1,00 | 2,94 |
| SL1594 | <i>ynal</i> | MscS family inner membrane protein ynal | -1,03 | 1,14 | -1,63 |
| SL1595 | <i>ydcN</i> | XRE Family Transcriptional Regulator | -1,13 | 1,13 | -1,04 |
| SL1596 | - | Hypothetical | -1,83 | -1,18 | -1,06 |
| SL1597 | <i>tpx</i> | Probable thiol peroxidase | -1,05 | 1,22 | 1,09 |
| SL1598 | - | Hypothetical | 1,16 | 1,08 | 1,18 |
| SL1599 | <i>yeeJ</i> | Invasin | 1,01 | -1,40 | -1,03 |
| SL1600 | - | Conserved Hypothetical Protein Exported Protein | -1,57 | -1,56 | -1,44 |
| SL1601 | - | Hypothetical Protein SL1601 | 1,07 | 1,17 | -1,26 |
| SL1602 | - | Hypothetical | -1,76 | 1,08 | -4,92 |
| SL1603 | <i>ygdR</i> | Outer Membrane Lipoprotein | 1,19 | 1,24 | -1,19 |
| SL1604 | <i>yjgJ</i> | Uncharacterized HTH-type transcriptional regulator yjgJ | 1,34 | 1,11 | 1,87 |
| SL1605 | <i>yjgl</i> | Uncharacterized oxidoreductase yjgl | -1,23 | -1,54 | 2,37 |
| SL1606 | <i>ytbE</i> | Uncharacterized oxidoreductase ytbE | -1,03 | -1,11 | 1,35 |
| SL1607 | <i>yhjC</i> | Uncharacterized HTH-type transcriptional regulator yhjC | 1,09 | 1,08 | 2,41 |
| SL1608 | - | NmrA Family Protein | 1,10 | 1,07 | 1,90 |
| SL1609 | <i>mppA</i> | Periplasmic murein peptide-binding protein | 1,15 | 1,00 | 1,82 |
| SL1610 | <i>mpaA</i> | Protein mpaA | 1,01 | -1,01 | -1,08 |
| SL1611 | <i>ycjG</i> | L-Ala-D/L-Glu epimerase | 1,29 | -1,05 | 1,18 |
| SL1612 | <i>tpx</i> | Probable thiol peroxidase | -1,28 | -1,22 | 2,53 |
| SL1613 | <i>tyrR</i> | Transcriptional regulatory protein tyrR | 1,19 | 1,22 | 1,07 |
| SL1614 | <i>ycjF</i> | UPF0283 membrane protein ycjF | 1,15 | 1,15 | 1,16 |
| SL1615 | <i>ycjX</i> | Uncharacterized protein ycjX | 1,10 | 1,04 | -1,58 |
| SL1616 | <i>pspE</i> | Thiosulfate sulfurtransferase PspE | -1,05 | 1,28 | -1,14 |
| SL1617 | <i>pspD</i> | Phage shock protein D | -1,19 | 1,34 | -2,02 |
| SL1618 | <i>pspC</i> | Phage shock protein C | -1,17 | 1,35 | -1,96 |
| SL1619 | <i>pspB</i> | Phage shock protein B | -1,15 | 1,34 | -2,10 |
| SL1620 | <i>pspA</i> | Phage shock protein A | -1,22 | 1,22 | -1,75 |
| SL1621 | <i>pspF</i> | Psp operon transcriptional activator | 1,09 | -1,00 | 2,78 |
| SL1622 | <i>sapA</i> | Peptide transport periplasmic protein sapA | 1,08 | 1,00 | -1,31 |
| SL1623 | <i>sapB</i> | Peptide transport system permease protein sapB | 1,10 | 1,16 | -1,15 |
| SL1624 | <i>sapC</i> | Peptide transport system permease protein sapC | -1,02 | -1,16 | -1,08 |
| SL1625 | <i>sapD</i> | Peptide transport system ATP-binding protein sapD | 1,16 | 1,09 | 1,22 |
| SL1626 | <i>sapF</i> | Peptide transport system ATP-binding protein sapF | 1,26 | 1,14 | 1,42 |
| SL1627 | <i>ydiV</i> | Uncharacterized protein ydiV | 1,20 | -1,14 | 1,44 |
| SL1628 | <i>steC</i> | Secreted effector kinase steC | -5,23 | 1,46 | -2,62 |
| SL1629 | - | Hypothetical A | 1,31 | 1,13 | 1,19 |
| SL1630 | <i>ycjE</i> | Uncharacterized protein ycjE | -1,40 | 1,43 | -1,95 |
| SL1631 | <i>fabl</i> | Enoyl-[acyl-carrier-protein] reductase [NADH] | -1,02 | -1,02 | -1,14 |
| SL1632 | <i>yciW</i> | Uncharacterized protein yciW | -1,03 | -1,05 | 1,51 |
| SL1633 | <i>rnb</i> | Exoribonuclease 2 | -1,15 | -1,12 | -1,78 |
| SL1634 | <i>gmr</i> | Protein gmr | 1,07 | 1,04 | 2,42 |
| SL1635 | <i>yciZ</i> | UPF0509 protein yciZ | 1,04 | 1,11 | 1,37 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-------------------|-------------------|-----------------------|
| SL1636 | <i>yciT</i> | Uncharacterized HTH-type transcriptional regulator <i>yciT</i> | 1,24 | 1,04 | 1,01 |
| SL1637 | <i>osmB</i> | Osmotically-inducible lipoprotein B | -1,30 | 1,02 | -4,73 |
| SL1638 | <i>yciH</i> | Uncharacterized protein <i>yciH</i> | -1,06 | 1,16 | -1,24 |
| SL1639 | <i>pyrF</i> | Orotidine 5'-phosphate decarboxylase | -1,46 | 1,05 | -2,53 |
| SL1640 | <i>yciM</i> | Uncharacterized protein <i>yciM</i> | -1,08 | 1,06 | -2,25 |
| SL1641 | <i>yciS</i> | Inner membrane protein <i>yciS</i> | 1,01 | 1,08 | -1,96 |
| SL1642 | <i>pgpB</i> | Phosphatidylglycerophosphatase B | 1,06 | -1,14 | -1,16 |
| SL1643 | <i>ribA</i> | GTP cyclohydrolase-2 | 1,11 | 1,01 | 1,06 |
| SL1644 | <i>acnA</i> | Aconitate hydratase 1 | 1,18 | 1,02 | 3,38 |
| SL1645 | <i>cysB</i> | HTH-type transcriptional regulator <i>cysB</i> | -1,04 | -1,01 | -1,06 |
| SL1646 | <i>topA</i> | DNA topoisomerase 1 | 1,17 | -1,11 | 1,64 |
| SL1647 | <i>yciN</i> | Protein <i>yciN</i> | 1,14 | 1,16 | 1,22 |
| SL1648 | <i>sohB</i> | Probable protease <i>sohB</i> | 1,02 | 1,02 | -1,14 |
| SL1649 | <i>yciK</i> | Uncharacterized oxidoreductase <i>yciK</i> | 1,05 | 1,03 | 2,60 |
| SL1650 | <i>btuR</i> | Cob(I)yrinic acid a,c-diamide adenosyltransferase | 1,19 | -1,12 | 2,90 |
| SL1651 | <i>rluB</i> | Ribosomal large subunit pseudouridine synthase B | 1,06 | 1,06 | -1,54 |
| SL1652 | <i>yciO</i> | Uncharacterized protein <i>yciO</i> | 1,00 | -1,17 | -1,34 |
| SL1653 | <i>trpH</i> | Protein <i>trpH</i> | 1,05 | -1,11 | -1,39 |
| SL1654 | <i>trpE</i> | Anthranilate synthase component 1 | -1,14 | 1,12 | 1,50 |
| SL1655 | <i>trpD</i> | Anthranilate synthase component II | -1,04 | 1,09 | 2,35 |
| SL1656 | <i>trpC</i> | Tryptophan biosynthesis protein <i>trpCF</i> | -1,00 | 1,03 | 1,06 |
| SL1657 | <i>trpB</i> | Tryptophan synthase beta chain | 1,10 | 1,16 | 1,33 |
| SL1658 | <i>trpA</i> | Tryptophan synthase alpha chain | 1,10 | 1,12 | 1,48 |
| SL1659 | <i>ymdF</i> | Uncharacterized protein <i>ymdF</i> | -1,55 | 1,10 | -3,54 |
| SL1660 | <i>yciF</i> | Protein <i>yciF</i> | -1,73 | 1,18 | -3,65 |
| SL1661 | <i>yciE</i> | Protein <i>yciE</i> | -1,42 | 1,25 | -3,21 |
| SL1662 | <i>katN</i> | Probable manganese catalase | -1,31 | 1,20 | -2,83 |
| SL1663 | <i>ompW</i> | Outer membrane protein W | 1,15 | 1,13 | 1,85 |
| SL1664 | <i>ykgJ</i> | Uncharacterized protein <i>ykgJ</i> | 1,17 | -1,05 | 1,52 |
| SL1665 | <i>yciC</i> | UPF0259 membrane protein CKO_01332 | -1,01 | -1,00 | -1,69 |
| SL1666 | <i>ispZ</i> | Probable intracellular septation protein | -1,19 | -1,16 | -2,06 |
| SL1667 | <i>yciA</i> | Acyl-CoA thioester hydrolase <i>yciA</i> | -1,03 | 1,14 | -1,66 |
| SL1668 | <i>tonB</i> | Protein <i>tonB</i> | 1,07 | 1,31 | -2,20 |
| SL1669 | <i>ycil</i> | Protein <i>ycil</i> | 1,09 | -1,09 | -1,02 |
| SL1670 | <i>cls</i> | Cardiolipin synthase | 1,06 | 1,03 | -1,23 |
| SL1671 | <i>yciU</i> | UPF0263 protein CKO_01325 | 1,00 | 1,09 | 1,09 |
| SL1672 | - | Putative potassium channel protein RPA4233 | 1,11 | 1,16 | 1,03 |
| SL1673 | <i>oppF</i> | Oligopeptide transport ATP-binding protein <i>oppF</i> | 1,18 | 1,00 | 2,57 |
| SL1674 | <i>oppD</i> | Oligopeptide transport ATP-binding protein <i>oppD</i> | 1,01 | -1,39 | 1,82 |
| SL1675 | <i>oppC</i> | Oligopeptide transport system permease protein <i>oppC</i> | -1,00 | -1,64 | 1,62 |
| SL1676 | <i>oppB</i> | Oligopeptide transport system permease protein <i>oppB</i> | -1,10 | -1,72 | 2,18 |
| SL1677 | <i>oppA</i> | Periplasmic oligopeptide-binding protein | -1,05 | -1,22 | 3,54 |
| SL1678 | - | Hypothetical | -1,01 | 1,01 | 1,98 |
| SL1679 | <i>ychE</i> | UPF0056 membrane protein <i>ychE</i> | -1,34 | 1,25 | -3,72 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL1680 | <i>adhE</i> | Aldehyde-alcohol dehydrogenase | 1,16 | 1,23 | -1,83 |
| SL1681 | <i>tdk</i> | Thymidine kinase | 1,05 | 1,03 | -1,56 |
| SL1682 | <i>hns</i> | DNA-binding protein H-NS | -1,03 | 1,01 | -1,01 |
| SL1683 | <i>galU</i> | UTP--glucose-1-phosphate uridylyltransferase | 1,10 | 1,04 | -1,38 |
| SL1684 | <i>hnr</i> | Protein hnr | 1,03 | -1,21 | -1,37 |
| SL1685 | <i>rssA</i> | NTE family protein rssA | -1,04 | -1,21 | -1,13 |
| SL1686 | <i>ychJ</i> | UPF0225 protein ychJ | -1,06 | -1,10 | -1,73 |
| SL1687 | <i>purU</i> | Formyltetrahydrofolate deformylase | 1,08 | -1,10 | 1,00 |
| SL1688 | <i>ybeQ</i> | Uncharacterized protein ybeQ | 1,05 | 1,06 | -1,04 |
| SL1689 | <i>narI</i> | Respiratory nitrate reductase 1 gamma chain | 1,04 | 1,24 | 2,45 |
| SL1690 | <i>narJ</i> | Nitrate reductase molybdenum cofactor assembly chaperone NarJ | 1,11 | 1,01 | 2,43 |
| SL1691 | <i>narH</i> | Respiratory nitrate reductase 1 beta chain | 1,08 | 1,23 | 2,12 |
| SL1692 | <i>narG</i> | Respiratory nitrate reductase 1 alpha chain | 1,06 | 1,07 | 2,24 |
| SL1693 | <i>narK</i> | Nitrite extrusion protein 1 | 1,03 | -1,15 | 1,66 |
| SL1694 | <i>narX</i> | Nitrate/nitrite sensor protein narX | 1,05 | 1,15 | -1,63 |
| SL1695 | <i>narL</i> | Nitrate/nitrite response regulator protein narL | 1,05 | 1,08 | 1,14 |
| SL1696 | <i>ychO</i> | Uncharacterized protein ychO | -1,07 | -1,09 | -2,00 |
| SL1697 | <i>ychN</i> | Protein ychN | 1,10 | 1,15 | -1,79 |
| SL1698 | <i>chaB</i> | Cation transport regulator chaB | -1,25 | -1,04 | -1,65 |
| SL1699 | <i>chaA</i> | Calcium/proton antiporter | 1,01 | -1,19 | -1,28 |
| SL1700 | <i>kdsA</i> | 2-dehydro-3-deoxyphosphooctonate aldolase | 1,04 | -1,07 | 1,34 |
| SL1701 | <i>sirB1</i> | Protein sirB1 | -1,11 | -1,15 | -1,86 |
| SL1702 | <i>sirB2</i> | Protein sirB2 | 1,48 | -1,03 | -2,42 |
| SL1703 | <i>hemK</i> | Protein methyltransferase hemK | 1,30 | -1,09 | -2,25 |
| SL1704 | <i>prfA</i> | Peptide chain release factor 1 | 1,21 | 1,09 | -2,31 |
| SL1705 | <i>hemA</i> | Glutamyl-tRNA reductase | 1,20 | 1,06 | -1,44 |
| SL1706 | <i>lolB</i> | Outer-membrane lipoprotein lolB | -1,13 | -1,15 | -2,18 |
| SL1707 | <i>ispE</i> | 4-diphosphocytidyl-2-C-methyl-D-erythritol kinase | -1,08 | -1,03 | -1,58 |
| SL1708 | <i>prs</i> | Ribose-phosphate pyrophosphokinase | -1,05 | -1,15 | -1,63 |
| SL1709 | <i>ychM</i> | Putative sulfate transporter ychM | 1,40 | -1,40 | -1,06 |
| SL1710 | <i>ychH</i> | Uncharacterized protein ychH | 1,38 | 1,30 | 3,18 |
| SL1711 | <i>pth</i> | Peptidyl-tRNA hydrolase | 1,04 | -1,01 | -1,86 |
| SL1712 | <i>engD</i> | GTP-dependent nucleic acid-binding protein engD | -1,06 | -1,30 | -1,81 |
| SL1713 | - | Hypothetical | 1,00 | -1,05 | 1,11 |
| SL1714 | <i>hyaA</i> | Hydrogenase-1 small chain | -1,30 | -2,04 | -2,23 |
| SL1715 | <i>hyaB</i> | Hydrogenase-1 large chain | -1,05 | -1,55 | 1,14 |
| SL1716 | <i>hyaC</i> | Probable Ni/Fe-hydrogenase 1 B-type cytochrome subunit | 1,21 | -1,28 | 1,10 |
| SL1717 | <i>hyaD</i> | Hydrogenase 1 maturation protease | 1,11 | -1,16 | -1,03 |
| SL1718 | NA | NA | 1,17 | -1,10 | 1,15 |
| SL1719 | <i>hyaF</i> | Hydrogenase-1 operon protein hyaF | 1,04 | -1,10 | 1,07 |
| SL1720 | <i>appC</i> | Cytochrome bd-II oxidase subunit 1 | 1,09 | -1,28 | 1,58 |
| SL1721 | <i>appB</i> | Cytochrome bd-II oxidase subunit 2 | 1,32 | 1,06 | 1,84 |
| SL1722 | <i>yccB</i> | Hypothetical Protein yccB | 1,43 | 1,03 | 1,51 |
| SL1723 | <i>gdhA</i> | Glutamate dehydrogenase | 1,13 | -1,42 | 17,53 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL1724 | <i>treA</i> | Periplasmic trehalase | 1,22 | 1,12 | 2,95 |
| SL1725 | <i>ympE</i> | UPF0410 protein ymge | 1,21 | 1,23 | 1,62 |
| SL1726 | <i>ycgR</i> | Flagellar brake protein YcgR | -1,35 | 1,14 | -5,01 |
| SL1727 | <i>emtA</i> | Endo-type membrane-bound lytic murein transglycosylase A | 1,00 | 1,06 | -2,10 |
| SL1728 | <i>ldcA</i> | Murein tetrapeptide carboxypeptidase | -1,05 | 1,06 | -1,51 |
| SL1729 | <i>cvrA</i> | Cell volume regulation protein A | -1,03 | 1,01 | -2,77 |
| SL1730 | <i>dadX</i> | Alanine racemase, catabolic | -1,27 | -1,83 | 6,94 |
| SL1731 | <i>dadA</i> | D-amino acid dehydrogenase small subunit | -1,36 | -1,36 | 9,25 |
| SL1732 | <i>ycgB</i> | Uncharacterized protein ycgB | -1,06 | 1,21 | 2,94 |
| SL1733 | <i>fadR</i> | Fatty acid metabolism regulator protein | 1,07 | -1,00 | -1,36 |
| SL1734 | <i>nhaB</i> | Na(+)/H(+) antiporter nhaB | -1,32 | -1,53 | -1,59 |
| SL1735 | <i>dsbB</i> | Disulfide bond formation protein B | 1,07 | -1,14 | -2,28 |
| SL1736 | <i>yeaR</i> | Uncharacterized protein yeaR | 1,36 | 1,02 | 1,48 |
| SL1737 | <i>gns</i> | Protein gns | 1,34 | 1,53 | 2,78 |
| SL1738 | - | Hypothetical Protein SL1738 | -1,03 | 1,17 | -1,08 |
| SL1739 | <i>ycgN</i> | UPF0260 protein CKO_01185 | 1,12 | -1,08 | -1,74 |
| SL1740 | <i>ycgM</i> | Uncharacterized protein ycgM | 1,04 | -1,04 | -1,33 |
| SL1741 | <i>ycgL</i> | UPF0745 protein ycgL | -1,02 | -1,00 | -1,52 |
| SL1742 | <i>minC</i> | Probable septum site-determining protein minC | -1,29 | -1,16 | -4,10 |
| SL1743 | <i>minD</i> | Septum site-determining protein minD | -1,05 | -1,05 | 1,29 |
| SL1744 | <i>minE</i> | Cell division topological specificity factor | -1,02 | 1,08 | 1,55 |
| SL1745 | <i>rnd</i> | Ribonuclease D | 1,08 | -1,05 | -1,80 |
| SL1747 | <i>fadD</i> | Long-chain-fatty-acid--CoA ligase | 1,07 | 1,29 | -1,02 |
| SL1748 | <i>yeaY</i> | Uncharacterized lipoprotein yeaY | -1,02 | 1,19 | -2,20 |
| SL1749 | <i>yeaZ</i> | M22 peptidase homolog yeaZ | -1,33 | -1,49 | -2,27 |
| SL1750 | <i>yoaA</i> | Probable ATP-dependent helicase yoaA | 1,07 | -1,06 | -1,64 |
| SL1751 | <i>yoaB</i> | UPF0076 protein yoaB | 1,13 | -1,25 | -1,30 |
| SL1752 | <i>yoaH</i> | UPF0181 protein yoaH | 1,17 | -1,05 | -1,31 |
| SL1753 | <i>pabB</i> | Para-aminobenzoate synthase component 1 | 1,03 | -1,14 | -1,73 |
| SL1754 | <i>nudL</i> | Uncharacterized Nudix hydrolase nudL | 1,10 | -1,20 | -1,15 |
| SL1755 | <i>sdaA</i> | L-serine dehydratase 1 | 1,18 | -1,08 | -1,20 |
| SL1756 | <i>yoaD</i> | Hypothetical Protein yoaD | -1,26 | 1,09 | -1,01 |
| SL1757 | <i>yoaE</i> | UPF0053 inner membrane protein yoaE | 1,07 | 1,08 | 1,45 |
| SL1758 | - | Cytoplasmic Protein | -1,12 | 1,19 | -1,47 |
| SL1759 | <i>manX</i> | PTS system mannose-specific EIIB component | 1,35 | 1,22 | -1,15 |
| SL1760 | <i>manY</i> | Mannose permease IIC component | 1,08 | 1,00 | -1,22 |
| SL1761 | <i>manZ</i> | Mannose permease IID component | 1,46 | 1,17 | -2,11 |
| SL1762 | <i>yobD</i> | UPF0266 membrane protein yobD | 1,13 | -1,35 | -5,91 |
| SL1763 | <i>yebN</i> | UPF0059 membrane protein CKO_01156 | 1,08 | -1,35 | -2,84 |
| SL1764 | <i>rImA</i> | Ribosomal RNA large subunit methyltransferase A | -1,09 | 1,06 | -1,97 |
| SL1765 | <i>ftsI</i> | Peptidoglycan synthase ftsI | 1,26 | 1,08 | -1,60 |
| SL1766 | <i>cspC</i> | Cold shock-like protein cspC | -1,13 | -1,17 | -1,04 |
| SL1767 | <i>yobF</i> | Uncharacterized protein yobF | -1,17 | -1,14 | -1,31 |
| SL1768 | <i>yebO</i> | Uncharacterized protein yebO | -1,07 | 1,12 | -3,12 |
| SL1769 | <i>mgrB</i> | Protein mgrB | 1,02 | 1,21 | -3,11 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL1770 | <i>yobH</i> | Uncharacterized protein yobH | -1,09 | 1,05 | -2,58 |
| SL1771 | <i>kdgR</i> | Pectin degradation repressor protein kdgR | 1,08 | 1,27 | 1,39 |
| SL1772 | <i>yebQ</i> | Uncharacterized transporter yebQ | -1,07 | -1,23 | -1,64 |
| SL1773 | <i>htpX</i> | Probable protease htpX homolog | 1,18 | 1,07 | 1,83 |
| SL1774 | <i>prc</i> | Tail-specific protease | 1,06 | -1,13 | -1,30 |
| SL1775 | <i>proQ</i> | ProP effector | -1,15 | -1,16 | -1,92 |
| SL1776 | <i>yebR</i> | Protein yebR | -1,06 | -1,36 | 1,01 |
| SL1777 | <i>yebS</i> | Inner membrane protein yebS | -1,06 | -1,02 | -1,12 |
| SL1778 | <i>yebT</i> | Uncharacterized protein yebT | 1,12 | -1,04 | 1,14 |
| SL1779 | <i>rsmF</i> | Ribosomal RNA small subunit methyltransferase F | 1,12 | 1,03 | -2,70 |
| SL1780 | <i>yebV</i> | Uncharacterized protein yebV | -1,01 | 1,16 | -2,02 |
| SL1781 | <i>yebW</i> | Uncharacterized protein yebW | 1,16 | 1,23 | -1,67 |
| SL1782 | <i>pphA</i> | Serine/threonine-protein phosphatase 1 | -1,24 | 1,06 | -4,92 |
| SL1783 | - | Hypothetical | -1,31 | 1,41 | -8,58 |
| SL1784 | <i>sopE2</i> | Guanine nucleotide exchange factor sopE2 | -1,51 | 1,15 | -16,49 |
| SL1785 | <i>ycgX</i> | Uncharacterized protein ycgX | -1,44 | 1,14 | -6,12 |
| SL1786 | - | Hypothetical | 1,03 | 1,09 | -2,05 |
| SL1787 | <i>bls</i> | Blasticidin-S acetyltransferase | -1,22 | 1,10 | 1,62 |
| SL1788 | - | Hypothetical Protein SL1788 | 1,09 | 1,35 | -1,42 |
| SL1789 | - | Hypothetical | -1,11 | 1,18 | 1,33 |
| SL1790 | - | Transposase for insertion sequence element ISRM3 | 1,03 | 1,20 | 1,17 |
| SL1791 | <i>intE</i> | Prophage lambda integrase | -1,08 | -1,08 | -1,15 |
| SL1792 | - | Hypothetical | -1,04 | 1,18 | -1,27 |
| SL1793 | <i>pagO</i> | Protein pagO | -1,97 | 1,23 | -5,37 |
| SL1794 | - | Hypothetical | -2,21 | 1,11 | -7,65 |
| SL1795 | - | Hypothetical | -1,97 | 1,32 | -5,78 |
| SL1796 | <i>pinE</i> | DNA-invertase from lambdoid prophage e14 | -1,46 | -1,01 | -1,82 |
| SL1797 | - | Hypothetical | -1,25 | 1,95 | -1,96 |
| SL1798 | <i>insF1</i> | Hypothetical Protein insF1 | -1,40 | 1,07 | -1,34 |
| SL1799 | - | PagK-Like Protein | -2,12 | 1,45 | -4,28 |
| SL1800 | <i>ycdD</i> | Tail fiber assembly protein homolog from lambdoid prophage Fels-1 | -1,84 | -1,23 | -2,96 |
| SL1801 | - | Hypothetical | -1,02 | 1,08 | -1,18 |
| SL1802 | - | Phage Membrane Protein | 1,25 | 1,32 | -1,26 |
| SL1803 | <i>rzpQ</i> | Uncharacterized protein rzpQ | 1,37 | 1,00 | -1,13 |
| SL1804 | - | Hypothetical | -1,63 | -1,36 | -3,58 |
| SL1805 | <i>recE</i> | Exodeoxyribonuclease 8 | -1,14 | 1,20 | -1,74 |
| SL1806 | <i>intE</i> | Prophage lambda integrase | 1,05 | 1,01 | 2,88 |
| SL1807 | <i>yebY</i> | Uncharacterized protein yebY | -1,06 | -1,13 | -1,04 |
| SL1808 | <i>yebZ</i> | Inner membrane protein yebZ | -1,03 | -1,37 | 1,32 |
| SL1809 | <i>yobA</i> | Protein yobA | 1,01 | -1,12 | 1,90 |
| SL1810 | <i>holE</i> | DNA polymerase III subunit theta | -1,04 | -1,01 | -1,04 |
| SL1811 | <i>yobB</i> | Uncharacterized protein yobB | 1,12 | -1,05 | 1,07 |
| SL1812 | <i>exoX</i> | Exodeoxyribonuclease 10 | 1,06 | 1,01 | -1,16 |
| SL1813 | <i>ptrB</i> | Protease 2 | 1,03 | 1,08 | -1,07 |
| SL1814 | <i>yebE</i> | Inner membrane protein yebE | 1,18 | 1,04 | 1,17 |
| SL1815 | <i>yebF</i> | Protein yebF | -1,03 | -1,01 | 1,27 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL1816 | <i>yebG</i> | Uncharacterized protein yebG | -1,01 | 1,10 | 1,37 |
| SL1817 | <i>purT</i> | Phosphoribosylglycinamide formyltransferase 2 | 1,03 | 1,17 | -1,46 |
| SL1818 | <i>eda</i> | KHG/KDPG aldolase | 1,16 | -1,06 | 1,07 |
| SL1819 | <i>edd</i> | Phosphogluconate dehydratase | -1,05 | -1,08 | -5,50 |
| SL1820 | <i>zwf</i> | Glucose-6-phosphate 1-dehydrogenase | 1,06 | -1,18 | -1,36 |
| SL1821 | <i>hexR</i> | HTH-type transcriptional regulator hexR | 1,07 | 1,06 | 2,24 |
| SL1822 | <i>pykA</i> | Pyruvate kinase II | -1,09 | -1,18 | 1,19 |
| SL1823 | <i>msbB1</i> | Lipid A biosynthesis (KDO)2-(lauroyl)-lipid IVA acyltransferase 1 | 1,03 | -1,07 | -1,29 |
| SL1824 | <i>yebA</i> | Uncharacterized metalloprotease yebA | -1,16 | -1,12 | -2,29 |
| SL1825 | <i>znuA</i> | High-affinity zinc uptake system protein znuA | -1,11 | 1,17 | -1,50 |
| SL1826 | <i>znuC</i> | Zinc import ATP-binding protein ZnuC | 1,38 | 1,24 | -1,38 |
| SL1827 | <i>znuB</i> | High-affinity zinc uptake system membrane protein znuB | 1,35 | 1,22 | -1,75 |
| SL1828 | <i>rvuB</i> | Holliday junction ATP-dependent DNA helicase rvuB | 1,01 | -1,20 | -1,03 |
| SL1829 | <i>rvuA</i> | Holliday junction ATP-dependent DNA helicase rvuA | -1,20 | -1,07 | -1,83 |
| SL1830 | - | Cytoplasmic Protein | 1,11 | 1,10 | -1,02 |
| SL1831 | - | Hypothetical | -1,20 | -1,14 | 1,29 |
| SL1832 | <i>yebB</i> | Uncharacterized protein yebB | 1,19 | -1,00 | 1,21 |
| SL1833 | <i>rvuC</i> | Crossover junction endodeoxyribonuclease rvuC | 1,13 | -1,10 | -1,05 |
| SL1834 | <i>yebC</i> | UPF0082 protein CKO_01097 | 1,18 | 1,04 | 1,34 |
| SL1835 | <i>nudB</i> | Dihydronoopterin triphosphate pyrophosphatase | 1,03 | -1,18 | -1,14 |
| SL1836 | <i>aspS</i> | Aspartyl-tRNA synthetase | -1,17 | -1,18 | -1,56 |
| SL1837 | <i>yecD</i> | Uncharacterized isochorismatase family protein yecD | -1,02 | -1,11 | -1,37 |
| SL1838 | <i>yecE</i> | UPF0759 protein yecE | -1,10 | -1,15 | -1,29 |
| SL1839 | <i>yecN</i> | Inner membrane protein yecN | 1,01 | 1,06 | -1,49 |
| SL1840 | <i>cmoA</i> | tRNA (cmo5U34)-methyltransferase | -1,01 | -1,08 | -2,10 |
| SL1841 | <i>cmoB</i> | tRNA (mo5U34)-methyltransferase | -1,14 | -1,08 | -1,96 |
| SL1842 | <i>cutC</i> | Copper homeostasis protein cutC | -1,03 | 1,02 | -1,01 |
| SL1843 | <i>yecM</i> | Protein yecM | -1,07 | -1,06 | -1,60 |
| SL1844 | <i>argS</i> | Arginyl-tRNA synthetase | -1,23 | 1,04 | -3,31 |
| SL1845 | <i>mrdA</i> | Penicillin-binding protein 2 | 1,00 | 1,10 | -1,56 |
| SL1846 | <i>yesR</i> | Unsaturated rhamnogalacturonyl hydrolase yesR | 1,38 | -1,05 | 1,01 |
| SL1847 | <i>flhE</i> | Flagellar protein flhE | 1,54 | 1,25 | 1,81 |
| SL1848 | <i>flhA</i> | Flagellar biosynthesis protein flhA | 1,16 | -1,09 | 1,33 |
| SL1849 | <i>flhB</i> | Flagellar biosynthetic protein flhB | 1,18 | 1,12 | -1,23 |
| SL1850 | <i>cheZ</i> | Chemotaxis protein cheZ | -1,01 | 1,09 | -2,12 |
| SL1851 | <i>cheY</i> | Chemotaxis protein cheY | -1,01 | 1,11 | -2,17 |
| SL1852 | <i>cheB</i> | Chemotaxis response regulator protein-glutamate methyltransferase | -1,12 | 1,10 | -3,86 |
| SL1853 | <i>cheR</i> | Chemotaxis protein methyltransferase | -1,24 | 1,07 | -3,83 |
| SL1854 | <i>tar</i> | Methyl-accepting chemotaxis protein II | -1,20 | 1,07 | -2,19 |
| SL1855 | <i>cheW</i> | Chemotaxis protein cheW | 1,17 | 1,25 | -1,48 |
| SL1856 | <i>cheA</i> | Chemotaxis protein cheA | 1,09 | 1,14 | -1,79 |
| SL1857 | <i>motB</i> | Motility protein B | -1,29 | 1,06 | -2,99 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL1858 | <i>motA</i> | Motility protein A | -1,20 | 1,23 | -3,31 |
| SL1859 | <i>flihC</i> | Flagellar transcriptional activator flihC | -1,22 | 1,15 | -3,09 |
| SL1860 | <i>flihD</i> | Transcriptional activator FlihD | -1,28 | 1,09 | -3,17 |
| SL1861 | <i>uspC</i> | Universal stress protein C | 1,20 | 1,43 | 1,74 |
| SL1862 | <i>otsA</i> | Alpha,alpha-trehalose-phosphate synthase [UDP-forming] | -1,06 | 1,03 | 1,27 |
| SL1863 | <i>otsB</i> | Trehalose-phosphate phosphatase | -1,14 | 1,02 | -1,31 |
| SL1864 | <i>thiJ</i> | Protein thiJ | 1,09 | 1,19 | -1,01 |
| SL1865 | <i>ftnB</i> | Ferritin-like protein 2 | 1,16 | 1,07 | 3,10 |
| SL1866 | - | Hypothetical | -1,00 | -1,56 | -1,04 |
| SL1867 | <i>yecR</i> | Uncharacterized protein yecR | 1,01 | 1,27 | -1,43 |
| SL1868 | <i>ftnA</i> | Ferritin-1 | -1,04 | -1,07 | 1,49 |
| SL1869 | <i>yecH</i> | Uncharacterized protein yecH | 1,05 | -1,02 | 1,05 |
| SL1870 | <i>tyrP</i> | Tyrosine-specific transport protein | 1,44 | 1,12 | -1,98 |
| SL1871 | <i>yecA</i> | Uncharacterized protein yecA | 1,52 | 1,20 | 1,80 |
| SL1872 | - | Hypothetical | -1,40 | 1,13 | -4,52 |
| SL1873 | - | NLP/P60 Protein | -1,69 | 1,23 | -1,65 |
| SL1874 | - | Hypothetical | -1,90 | 1,19 | -4,78 |
| SL1875 | <i>pgsA</i> | CDP-diacylglycerol-glycerol-3-phosphate 3-phosphatidyltransferase | 1,14 | 1,05 | 1,03 |
| SL1876 | <i>uvrC</i> | UvrABC system protein C | 1,11 | -1,11 | -2,18 |
| SL1877 | <i>uvrY</i> | Response regulator uvrY | -1,01 | 1,05 | -1,88 |
| SL1878 | <i>yecF</i> | Uncharacterized protein yecF | -1,09 | 1,13 | -8,87 |
| SL1879 | <i>sdiA</i> | Regulatory protein sdiA | -1,09 | 1,23 | -3,85 |
| SL1880 | <i>yecC</i> | Uncharacterized amino-acid ABC transporter ATP-binding protein yecC | 1,29 | 1,23 | -1,15 |
| SL1881 | <i>yecS</i> | Inner membrane amino-acid ABC transporter permease protein yecS | 1,01 | -1,12 | -1,12 |
| SL1882 | <i>dcyD</i> | D-cysteine desulfhydrase | 1,11 | -1,03 | 1,15 |
| SL1883 | <i>fliY</i> | Cystine-binding periplasmic protein | -1,01 | -1,03 | -1,15 |
| SL1884 | <i>fliZ</i> | Protein fliZ | -1,05 | -1,03 | -1,25 |
| SL1885 | <i>fliA</i> | RNA polymerase sigma factor for flagellar operon | -1,12 | -1,07 | -1,39 |
| SL1887 | <i>fliB</i> | Lysine-N-methylase | -1,03 | -1,10 | -1,70 |
| SL1888 | <i>fliC</i> | Flagellin | -1,06 | -1,01 | -1,10 |
| SL1889 | <i>fliD</i> | Flagellar hook-associated protein 2 | -1,07 | 1,01 | -2,40 |
| SL1890 | <i>fliS</i> | Flagellar protein fliS | -1,30 | -1,22 | -3,14 |
| SL1891 | <i>fliT</i> | Flagellar protein fliT | -1,26 | -1,14 | -3,00 |
| SL1892 | <i>amyA</i> | Cytoplasmic alpha-amylase | 1,06 | -1,02 | 1,31 |
| SL1893 | <i>yedD</i> | Uncharacterized lipoprotein yedD | -1,07 | -1,15 | 1,91 |
| SL1894 | <i>yedE</i> | UPF0394 inner membrane protein yedE | -1,04 | -1,08 | 3,86 |
| SL1895 | <i>yedF</i> | UPF0033 protein yedF | 1,16 | 1,05 | 3,15 |
| SL1896 | - | Hypothetical A | -1,92 | -1,34 | -3,36 |
| SL1897 | <i>fliE</i> | Flagellar hook-basal body complex protein fliE | 1,01 | -1,22 | 1,16 |
| SL1898 | <i>fliF</i> | Flagellar M-ring protein | 1,04 | -1,17 | -1,12 |
| SL1899 | <i>fliG</i> | Flagellar motor switch protein FliG | 1,11 | -1,19 | 1,38 |
| SL1900 | <i>fliH</i> | Flagellar assembly protein fliH | 1,19 | -1,02 | 1,42 |
| SL1901 | <i>fliI</i> | Flagellum-specific ATP synthase | 1,16 | 1,01 | 1,10 |
| SL1902 | <i>fliJ</i> | Flagellar fliJ protein | 1,20 | 1,30 | 2,04 |
| SL1903 | <i>fliK</i> | Flagellar hook-length control protein | 1,18 | 1,14 | 1,07 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>greA</i> vs | <i>greB</i> vs | <i>greAgreB</i> |
|--------|--------------|---|----------------|----------------|-----------------|
| | | | WT | WT | vs WT |
| SL1904 | <i>fliL</i> | Flagellar protein FliL | 1,10 | -1,10 | 1,09 |
| SL1905 | <i>fliM</i> | Flagellar motor switch protein FliM | 1,06 | -1,05 | 1,05 |
| SL1906 | <i>fliN</i> | Flagellar motor switch protein FliN | 1,04 | -1,02 | 1,03 |
| SL1907 | <i>fliO</i> | Flagellar protein fliO | 1,14 | -1,20 | -1,06 |
| SL1908 | <i>fliP</i> | Flagellar biosynthetic protein fliP | 1,17 | 1,00 | -1,19 |
| SL1909 | <i>fliQ</i> | Flagellar biosynthetic protein FliQ | 1,15 | 1,14 | -1,21 |
| SL1910 | <i>fliR</i> | Flagellar biosynthetic protein fliR | 1,03 | 1,17 | -1,37 |
| SL1911 | <i>rcsA</i> | Colanic acid capsular biosynthesis activation protein A | -1,16 | 1,36 | -2,52 |
| SL1912 | <i>dsrB</i> | Protein dsrB | 1,25 | 1,25 | -1,15 |
| SL1913 | <i>yodD</i> | Uncharacterized protein yodD | 1,28 | 1,20 | 1,33 |
| SL1914 | <i>yedP</i> | Putative mannosyl-3-phosphoglycerate phosphatase | 1,55 | -1,05 | -1,26 |
| SL1915 | <i>yedQ</i> | Cellulose synthesis regulatory protein | -1,07 | 1,04 | 1,08 |
| SL1916 | <i>yodC</i> | Uncharacterized protein yodC | 1,01 | 1,18 | -1,18 |
| SL1917 | <i>yedl</i> | Inner membrane protein yedl | -1,20 | -1,43 | -1,63 |
| SL1918 | <i>yedA</i> | Uncharacterized inner membrane transporter yedA | 1,17 | -1,15 | -1,17 |
| SL1919 | <i>vsr</i> | Very short patch repair protein | 1,14 | -1,07 | -1,06 |
| SL1920 | <i>dcm</i> | DNA-cytosine methyltransferase | 1,14 | 1,07 | -1,21 |
| SL1921 | <i>yedJ</i> | Uncharacterized protein yedJ | 1,03 | -1,03 | 1,34 |
| SL1922 | <i>yedR</i> | Inner membrane protein yedR | 1,03 | 1,36 | -4,09 |
| SL1923 | <i>ompS1</i> | Outer membrane protein S1 | 1,31 | 1,22 | 2,32 |
| SL1924 | <i>cspJ</i> | Cold shock-like protein cspJ | -1,53 | -1,31 | -2,11 |
| SL1925 | <i>umuC</i> | Protein umuC | 1,05 | -1,11 | 1,47 |
| SL1926 | <i>umuD</i> | Protein umuD | 1,28 | 1,20 | 1,75 |
| SL1927 | - | Hypothetical | -1,15 | 1,15 | -1,93 |
| SL1928 | - | Cytoplasmic Protein | -5,33 | 1,56 | -7,81 |
| SL1929 | <i>ycdD</i> | Tail fiber assembly protein homolog from lambdoid prophage Fels-1 | -1,42 | -1,05 | -1,14 |
| SL1930 | <i>ycfK</i> | Uncharacterized protein ycfK | -1,22 | -1,10 | 1,19 |
| SL1931 | <i>ymfQ</i> | Uncharacterized protein ymfQ in lambdoid prophage e14 region | -1,37 | -1,11 | -1,75 |
| SL1932 | <i>ymfP</i> | Putative protein ymfP | -1,69 | -1,28 | -1,79 |
| SL1933 | <i>ymfP</i> | Putative protein ymfP | -1,57 | -1,19 | -1,99 |
| SL1934 | - | Hypothetical | -1,55 | -1,27 | -1,83 |
| SL1935 | - | Mu-like prophage FluMu protein gp45 | -1,51 | -1,17 | -1,68 |
| SL1936 | - | Tail Protein | -1,55 | -1,14 | -1,63 |
| SL1937 | - | Mu-like prophage FluMu DNA circulation protein | -1,24 | -1,14 | -1,61 |
| SL1938 | - | Phage Tail Tape Measure Protein | -1,35 | -1,22 | -1,27 |
| SL1939 | - | Hypothetical | -1,35 | -1,30 | -1,00 |
| SL1940 | - | Hypothetical | -1,33 | -1,11 | -1,05 |
| SL1941 | - | Mu-like prophage FluMu tail sheath protein | -1,38 | -1,15 | -1,70 |
| SL1942 | - | Hypothetical | -1,72 | -1,22 | -2,95 |
| SL1943 | - | Hypothetical | -1,68 | -1,15 | -2,74 |
| SL1944 | - | Hypothetical | -1,59 | -1,10 | -2,55 |
| SL1945 | - | Hypothetical | -1,56 | -1,07 | -2,73 |
| SL1946 | - | Hypothetical | -1,66 | -1,10 | -2,68 |
| SL1947 | - | Phage Capsid Protein | -1,49 | -1,06 | -1,80 |
| SL1948 | - | Phage Prohead Protease | -1,54 | -1,04 | -1,82 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL1949 | <i>ymfO</i> | Putative uncharacterized protein <i>ymfO</i> | -1,45 | -1,07 | -2,59 |
| SL1950 | <i>ymfN</i> | Uncharacterized protein <i>ymfN</i> | -1,38 | -1,14 | -3,34 |
| SL1951 | - | P27 Family Phage Terminase Small Subunit | -1,56 | -1,17 | -3,72 |
| SL1952 | - | Hypothetical | -1,58 | -1,12 | -3,08 |
| SL1953 | - | Hypothetical Protein SL1953 | -1,40 | -1,02 | -2,20 |
| SL1954 | - | Hypothetical | -1,46 | -1,09 | -1,96 |
| SL1955 | <i>rzpD</i> | Putative Rz endopeptidase from lambdoid prophage DLP12 | -1,36 | -1,16 | -3,37 |
| SL1956 | - | Uncharacterized protein HI_1415 | -1,45 | -1,11 | -3,36 |
| SL1957 | - | Phage Holin Lambda Family | -1,42 | -1,12 | -3,53 |
| SL1958 | - | Hypothetical Protein SL1958 | -1,02 | 1,09 | -1,48 |
| SL1959 | - | Hypothetical | -1,39 | -1,48 | 1,55 |
| SL1960 | <i>ydfU</i> | Uncharacterized protein <i>ydfU</i> | -1,08 | -1,15 | 1,53 |
| SL1961 | - | Hypothetical | -1,00 | 1,06 | 2,40 |
| SL1962 | <i>yfdM</i> | Putative uncharacterized protein <i>yfdM</i> | -1,19 | -1,23 | 2,13 |
| SL1963 | <i>yfdN</i> | Uncharacterized protein <i>yfdN</i> | -1,14 | -1,13 | 2,23 |
| SL1964 | <i>yfdO</i> | Hypothetical | -1,30 | -1,23 | 2,05 |
| SL1965 | - | Hypothetical | -1,31 | -1,18 | 1,73 |
| SL1966 | <i>ymfL</i> | Uncharacterized protein <i>ymfL</i> | -1,50 | -1,10 | 1,78 |
| SL1967 | - | Phage Repressor | -1,04 | 1,02 | 1,24 |
| SL1968 | <i>yfdP</i> | Uncharacterized protein <i>yfdP</i> | -1,03 | 1,04 | 2,99 |
| SL1969 | <i>yfdQ</i> | Uncharacterized protein <i>yfdQ</i> | -1,17 | -1,09 | 3,27 |
| SL1970 | <i>yfdR</i> | Uncharacterized protein <i>yfdR</i> | -1,20 | -1,18 | 2,48 |
| SL1971 | - | Hypothetical | -1,18 | -1,23 | 2,22 |
| SL1972 | - | Hypothetical | -1,10 | -1,10 | 2,63 |
| SL1973 | - | Hypothetical | 1,03 | -1,30 | 2,66 |
| SL1974 | - | Endodeoxyribonuclease | -1,19 | -1,34 | 1,84 |
| SL1975 | - | Phage Protein | -1,23 | -1,25 | 2,00 |
| SL1976 | <i>intE</i> | Phage Integrase Family Protein | -1,15 | 1,03 | 1,07 |
| SL1977 | <i>mtfA</i> | Protein <i>mtfA</i> | 1,31 | 1,30 | 2,90 |
| SL1978 | <i>intB</i> | Putative prophage P4 integrase | 1,91 | 1,28 | 1,21 |
| SL1979 | - | Hypothetical | 1,30 | 1,15 | 1,57 |
| SL1980 | - | Hypothetical | 1,02 | -1,04 | 1,20 |
| SL1981 | - | Hypothetical | 1,49 | -1,05 | 1,66 |
| SL1982 | <i>ybeQ</i> | Uncharacterized protein <i>ybeQ</i> | -1,07 | -1,42 | 1,44 |
| SL1983 | - | Hypothetical | 1,05 | -1,18 | 1,45 |
| SL1984 | - | Hypothetical | -1,01 | 1,05 | -1,06 |
| SL1985 | - | Hypothetical | 1,28 | -1,06 | 1,50 |
| SL1986 | <i>amn</i> | AMP nucleosidase | 1,16 | 1,00 | 1,80 |
| SL1987 | - | Hypothetical | 1,10 | 1,21 | -1,19 |
| SL1988 | - | Hypothetical Protein SL1988 | 1,13 | 1,16 | -1,18 |
| SL1989 | - | Hypothetical | 1,20 | 1,03 | 1,33 |
| SL1990 | <i>yeeO</i> | Uncharacterized transporter <i>yeeO</i> | -1,02 | 1,05 | -1,42 |
| SL1991 | <i>erfK</i> | Probable L,D-transpeptidase ErfK/SrfK | 1,09 | 1,16 | 1,73 |
| SL1992 | <i>cobT</i> | Nicotinate-nucleotide--dimethylbenzimidazole phosphoribosyltransferase | 1,04 | -1,15 | -1,44 |
| SL1993 | <i>cobS</i> | Cobalamin synthase | -1,01 | -1,29 | -2,17 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-------------------|-------------------|-----------------------|
| SL1994 | <i>cobU</i> | Bifunctional adenosylcobalamin biosynthesis protein cobU | 1,05 | -1,25 | -1,90 |
| SL1995 | <i>cbiP</i> | Cobyric acid synthase | -1,02 | -1,23 | -1,59 |
| SL1996 | <i>cbiO</i> | Cobalt import ATP-binding protein CbiO | -1,16 | -1,15 | -1,67 |
| SL1997 | <i>cbiQ</i> | Cobalt transport protein cbiQ | -1,19 | -1,26 | -1,67 |
| SL1998 | <i>cbiN</i> | Cobalt transport protein cbiN | -1,21 | -1,05 | -1,36 |
| SL1999 | <i>cbiM</i> | Protein cbiM | -1,13 | 1,01 | -1,38 |
| SL2000 | <i>cbiL</i> | Cobalt-precorrin-2 C(20)-methyltransferase | -1,22 | -1,18 | -1,39 |
| SL2001 | <i>cbiK</i> | Sirohydrochlorin cobaltochelatase | -1,14 | -1,16 | -1,61 |
| SL2002 | <i>cbiJ</i> | Cobalt-precorrin-6A reductase | -1,05 | -1,31 | -1,68 |
| SL2003 | <i>cbiH</i> | Cobalt-precorrin-3B C(17)-methyltransferase | -1,06 | -1,26 | -1,74 |
| SL2004 | <i>cbiG</i> | Protein cbiG | -1,04 | -1,11 | -1,59 |
| SL2005 | <i>cbiF</i> | Cobalt-precorrin-4 C(11)-methyltransferase | -1,01 | -1,05 | -1,53 |
| SL2006 | <i>cbiT</i> | Probable cobalt-precorrin-6Y C(15)-methyltransferase [decarboxylating] | 1,08 | 1,11 | -2,83 |
| SL2007 | <i>cbiE</i> | Probable cobalt-precorrin-6Y C(5)-methyltransferase | 1,12 | -1,05 | -3,51 |
| SL2008 | <i>cbiD</i> | Putative cobalt-precorrin-6A synthase [deacetylating] | 1,22 | 1,23 | -2,77 |
| SL2009 | <i>cbiC</i> | Cobalt-precorrin-8X methylmutase | 1,01 | 1,01 | -2,23 |
| SL2010 | <i>cbiB</i> | Cobalamin biosynthesis protein cbiB | 1,02 | 1,05 | -3,16 |
| SL2011 | <i>cbiA</i> | Cobyric acid A,C-diamide synthase | 1,11 | 1,33 | -1,82 |
| SL2012 | <i>pocR</i> | Regulatory protein pocR | -1,01 | 1,50 | 1,34 |
| SL2013 | <i>pduF</i> | Propanediol diffusion facilitator | 1,29 | 1,42 | -3,03 |
| SL2014 | <i>pduA</i> | Propanediol utilization protein pduA | -1,43 | 1,42 | -22,81 |
| SL2015 | <i>pduB</i> | Propanediol utilization protein pduB | -1,67 | 1,17 | -40,16 |
| SL2016 | <i>pduC</i> | Propanediol dehydratase large subunit | -1,47 | -1,07 | -24,41 |
| SL2017 | <i>pduD</i> | Propanediol dehydratase medium subunit | -1,57 | -1,14 | -38,60 |
| SL2018 | <i>pduE</i> | Propanediol dehydratase small subunit | -1,75 | -1,25 | -66,46 |
| SL2019 | - | Glycerol Dehydratase Reactivation Factor Large Subunit | -1,77 | -1,18 | -53,01 |
| SL2020 | - | Hypothetical | -1,85 | -1,16 | -77,87 |
| SL2021 | <i>pduA</i> | Propanediol utilization protein pduA | -1,69 | -1,19 | -20,95 |
| SL2022 | - | Propanediol Utilization Protein PduK | -1,67 | -1,31 | -18,88 |
| SL2023 | - | Propanediol Utilization Protein | -2,00 | -1,44 | -25,45 |
| SL2024 | - | Propanediol Utilization Protein | -1,98 | -1,30 | -26,37 |
| SL2025 | <i>ccmL</i> | Carbon dioxide concentrating mechanism protein ccmL | -1,73 | -1,23 | -20,64 |
| SL2026 | - | Cob(I)yrinic acid a,c-diamide adenosyltransferase | -1,80 | -1,25 | -21,04 |
| SL2027 | <i>eutE</i> | Ethanolamine utilization protein eutE | -1,52 | -1,18 | -8,20 |
| SL2028 | <i>adh1</i> | NADPH-dependent butanol dehydrogenase | -1,56 | -1,41 | -9,36 |
| SL2029 | <i>rnfC</i> | Electron transport complex protein rnfC | -1,93 | -1,59 | -4,59 |
| SL2030 | <i>eutM</i> | Microcompartments Protein | -1,28 | -1,28 | -3,61 |
| SL2031 | <i>pduU</i> | Propanediol utilization protein pduU | -1,53 | -1,36 | -4,09 |
| SL2032 | <i>pduV</i> | Propanediol utilization protein pduV | -1,75 | -1,80 | -3,98 |
| SL2033 | <i>pduW</i> | Probable propionate kinase | -1,52 | -1,24 | -3,31 |
| SL2034 | - | Hypothetical | 1,42 | 1,08 | -2,41 |
| SL2035 | <i>yeeX</i> | UPF0265 protein Ent638_2575 | 1,03 | -1,04 | -1,75 |
| SL2036 | <i>yeeA</i> | Inner membrane protein yeeA | 1,10 | 1,09 | 1,44 |
| SL2037 | <i>gyrl</i> | DNA gyrase inhibitory protein homolog | 1,20 | 1,24 | 4,09 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL2038 | <i>dacD</i> | D-alanyl-D-alanine carboxypeptidase dacD | 1,14 | -1,00 | -3,59 |
| SL2039 | <i>phsC</i> | Thiosulfate reductase cytochrome B subunit | 1,30 | 1,05 | -1,50 |
| SL2040 | <i>phsB</i> | Thiosulfate reductase electron transport protein phsB | 1,32 | -1,03 | -1,80 |
| SL2041 | <i>phsA</i> | Thiosulfate reductase | 1,31 | 1,07 | -1,60 |
| SL2042 | <i>ybjQ</i> | Cytoplasmic Protein | -1,10 | 1,09 | 1,06 |
| SL2043 | <i>sopA</i> | E3 ubiquitin-protein ligase SopA | -1,29 | -1,17 | -11,05 |
| SL2044 | <i>sbcB</i> | Exodeoxyribonuclease I | -1,18 | -1,39 | -1,84 |
| SL2045 | <i>yeeF</i> | Inner membrane transport protein yeeF | 1,13 | 1,09 | -1,13 |
| SL2046 | <i>yeeY</i> | Uncharacterized HTH-type transcriptional regulator | 1,13 | 1,24 | -1,04 |
| SL2047 | <i>yeeZ</i> | Protein yeeZ | 1,05 | 1,09 | 1,38 |
| SL2048 | <i>hisG</i> | ATP phosphoribosyltransferase | 1,19 | 1,02 | 1,90 |
| SL2049 | <i>hisD</i> | Histidinol dehydrogenase | 1,16 | -1,09 | 3,14 |
| SL2050 | <i>hisC</i> | Histidinol-phosphate aminotransferase | 1,27 | 1,00 | 3,41 |
| SL2051 | <i>hisB</i> | Histidine biosynthesis bifunctional protein hisB | 1,25 | -1,13 | 2,86 |
| SL2052 | <i>hisH</i> | Imidazole glycerol phosphate synthase subunit hisH | 1,21 | -1,23 | 2,78 |
| SL2053 | <i>hisA</i> | 1-(5-phosphoribosyl)-5-[(5-phosphoribosylamino)methylideneamino]imidazole-4-carboxamide isomerase | 1,22 | -1,18 | 2,60 |
| SL2054 | <i>hisF</i> | Imidazole glycerol phosphate synthase subunit hisF | 1,31 | -1,03 | 2,74 |
| SL2055 | <i>hisI</i> | Histidine biosynthesis bifunctional protein hisIE | 1,21 | -1,08 | 2,06 |
| SL2056 | <i>wzzB</i> | Chain length determinant protein | -1,51 | 1,00 | -6,76 |
| SL2057 | <i>udg</i> | UDP-glucose 6-dehydrogenase | -1,82 | 1,07 | -6,30 |
| SL2058 | <i>gnd</i> | 6-phosphogluconate dehydrogenase, decarboxylating | 1,10 | -1,05 | 1,47 |
| SL2059 | <i>rfbP</i> | Undecaprenyl-phosphate galactose phosphotransferase | -1,05 | 1,05 | -1,01 |
| SL2060 | <i>rfbK</i> | Phosphomannomutase | -1,01 | -1,05 | 1,27 |
| SL2061 | <i>rfbM</i> | Mannose-1-phosphate guanylyltransferase rfbM | -1,12 | -1,21 | -1,23 |
| SL2062 | <i>rfbN</i> | O antigen biosynthesis rhamnosyltransferase rfbN | -1,07 | -1,19 | -1,11 |
| SL2063 | <i>rfbU</i> | Protein rfbU | -1,03 | -1,14 | -1,08 |
| SL2064 | <i>rfbV</i> | O antigen biosynthesis abequosyltransferase rfbV | -1,20 | -1,07 | -1,36 |
| SL2065 | <i>rfbX</i> | Putative O-antigen transporter | -1,06 | -1,21 | -1,11 |
| SL2066 | <i>rfbJ</i> | CDP-abequose synthase | -1,10 | -1,12 | 1,51 |
| SL2067 | <i>rfbH</i> | Lipopolysaccharide biosynthesis protein rfbH | -1,01 | -1,15 | 1,44 |
| SL2068 | <i>rfbG</i> | CDP-glucose 4,6-dehydratase | -1,01 | -1,10 | 1,23 |
| SL2069 | <i>rfbF</i> | Glucose-1-phosphate cytidylyltransferase | -1,03 | -1,09 | 1,15 |
| SL2070 | <i>rfbI</i> | Protein rfbI | -1,12 | -1,18 | -1,20 |
| SL2071 | <i>rfbC</i> | dTDP-4-dehydrorhamnose 3,5-epimerase | -1,07 | -1,17 | -1,15 |
| SL2072 | <i>rmlA1</i> | Glucose-1-phosphate thymidylyltransferase 1 | 1,07 | -1,09 | -1,25 |
| SL2073 | <i>rfbD</i> | dTDP-4-dehydrorhamnose reductase | 1,05 | -1,09 | -1,38 |
| SL2074 | <i>rfbB</i> | dTDP-glucose 4,6-dehydratase | 1,11 | 1,02 | -1,81 |
| SL2075 | <i>galF</i> | UTP--glucose-1-phosphate uridylyltransferase | 1,03 | 1,11 | -2,43 |
| SL2076 | <i>wcaM</i> | Colanic acid biosynthesis protein wcaM | 1,19 | 1,01 | 1,65 |
| SL2077 | <i>wcaL</i> | Putative colanic acid biosynthesis glycosyltransferase wcaL | 1,29 | -1,03 | 3,22 |
| SL2078 | <i>wcaK</i> | Colanic acid biosynthesis protein wcaK | 1,32 | 1,01 | 2,81 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-------------------|-------------------|-----------------------|
| SL2079 | <i>wzxC</i> | Lipopolysaccharide biosynthesis protein <i>wzxC</i> | 1,52 | -1,11 | 1,29 |
| SL2080 | <i>wcaJ</i> | Putative colanic biosynthesis UDP-glucose lipid carrier transferase | 1,15 | -1,28 | 1,65 |
| SL2081 | <i>manB</i> | Phosphomannomutase | 1,91 | 1,15 | 2,85 |
| SL2082 | <i>manC</i> | Mannose-1-phosphate guanylyltransferase <i>manC</i> | 1,16 | -1,09 | 1,21 |
| SL2083 | <i>wcaI</i> | Putative colanic acid biosynthesis glycosyl transferase <i>wcaI</i> | 1,26 | 1,18 | 1,17 |
| SL2084 | <i>nudD</i> | GDP-mannose mannosyl hydrolase | 1,37 | 1,36 | 1,67 |
| SL2085 | <i>fcl</i> | GDP-L-fucose synthase | 1,07 | 1,07 | 1,11 |
| SL2086 | <i>gmd</i> | GDP-mannose 4,6-dehydratase | 1,13 | 1,26 | 1,40 |
| SL2087 | <i>wcaF</i> | Putative colanic acid biosynthesis acetyltransferase <i>wcaF</i> | -1,05 | 1,46 | -1,57 |
| SL2088 | <i>wcaE</i> | Putative colanic acid biosynthesis glycosyl transferase <i>wcaE</i> | -1,06 | 1,38 | -1,15 |
| SL2089 | <i>wcaD</i> | Putative colanic acid polymerase | -1,09 | -1,19 | 1,07 |
| SL2090 | <i>wcaC</i> | Putative colanic acid biosynthesis glycosyl transferase <i>wcaC</i> | -1,16 | -1,09 | 1,13 |
| SL2091 | <i>wcaB</i> | Putative colanic acid biosynthesis acetyltransferase <i>wcaB</i> | 1,35 | -1,18 | 1,62 |
| SL2092 | <i>wcaA</i> | Putative colanic acid biosynthesis glycosyl transferase <i>wcaA</i> | 1,08 | 1,00 | 1,47 |
| SL2093 | <i>wzc</i> | Tyrosine-protein kinase <i>wzc</i> | -1,05 | 1,00 | -1,15 |
| SL2094 | <i>wzb</i> | Low molecular weight protein-tyrosine-phosphatase <i>wzb</i> | -1,29 | 1,11 | -1,41 |
| SL2095 | <i>wza</i> | Putative polysaccharide export protein <i>wza</i> | -1,10 | -1,18 | -1,57 |
| SL2096 | <i>yegH</i> | UPF0053 protein <i>yegH</i> | -1,10 | -1,03 | -1,81 |
| SL2097 | <i>asmA</i> | Protein AsmA | 1,12 | -1,01 | -1,01 |
| SL2098 | <i>dcd</i> | Deoxycytidine triphosphate deaminase | 1,03 | -1,02 | 1,07 |
| SL2099 | <i>udk</i> | Uridine kinase | 1,19 | 1,20 | -2,45 |
| SL2100 | <i>yegE</i> | Probable diguanylate cyclase <i>YegE</i> | 1,04 | 1,26 | -1,57 |
| SL2101 | <i>alkA</i> | DNA-3-methyladenine glycosylase 2 | -1,19 | -1,09 | -1,18 |
| SL2102 | <i>yegD</i> | Uncharacterized chaperone protein <i>yegD</i> | -1,09 | -1,01 | -1,53 |
| SL2103 | <i>mdtA</i> | Multidrug resistance protein <i>mdtA</i> | -1,18 | -1,07 | -1,74 |
| SL2104 | <i>mdtB</i> | Multidrug resistance protein <i>mdtB</i> | 1,25 | 1,14 | -1,23 |
| SL2105 | <i>mdtC</i> | Multidrug resistance protein <i>mdtC</i> | 1,03 | 1,22 | -1,49 |
| SL2106 | <i>mdtD</i> | Putative multidrug resistance protein <i>mdtD</i> | 1,11 | 1,19 | -1,22 |
| SL2107 | <i>baeS</i> | Signal transduction histidine-protein kinase <i>BaeS</i> | -1,25 | -1,02 | -2,13 |
| SL2108 | <i>baeR</i> | Transcriptional regulatory protein <i>BaeR</i> | -1,30 | -1,25 | -1,58 |
| SL2109 | - | Hypothetical | -1,46 | 1,05 | -1,60 |
| SL2110 | - | Hypothetical | -1,10 | -1,17 | -1,30 |
| SL2111 | - | Hypothetical | 1,18 | -1,11 | 1,24 |
| SL2112 | <i>yegQ</i> | Uncharacterized protease <i>yegQ</i> | -1,03 | 1,12 | -2,43 |
| SL2113 | - | Hypothetical | -1,21 | 1,30 | -1,00 |
| SL2114 | <i>cesT</i> | Tir chaperone | -3,66 | 1,12 | -1,47 |
| SL2115 | - | Hypothetical | -4,46 | 1,33 | -2,96 |
| SL2116 | - | Hypothetical | 1,36 | 1,91 | 1,14 |
| SL2117 | <i>yegS</i> | Probable lipid kinase <i>yegS</i> | 1,04 | 1,19 | -1,63 |
| SL2118 | <i>fbaB</i> | Fructose-bisphosphate aldolase class 1 | 1,26 | 1,34 | 1,76 |
| SL2119 | <i>yegT</i> | Putative nucleoside transporter <i>yegT</i> | -1,23 | -1,16 | 4,25 |
| SL2120 | <i>yegU</i> | Uncharacterized protein <i>yegU</i> | -1,16 | -1,12 | 2,62 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL2121 | <i>yegV</i> | Uncharacterized sugar kinase <i>yegV</i> | -1,04 | 1,05 | 2,37 |
| SL2122 | <i>yegW</i> | Uncharacterized HTH-type transcriptional regulator <i>yegW</i> | 1,13 | 1,07 | 1,37 |
| SL2123 | <i>thiD</i> | Hydroxymethylpyrimidine/phosphomethylpyrimidine kinase | 1,28 | 1,23 | 1,66 |
| SL2124 | <i>thiM</i> | Hydroxyethylthiazole kinase | 1,23 | 1,17 | 1,16 |
| SL2125 | <i>yohN</i> | Uncharacterized protein <i>yohN</i> | 1,09 | 1,20 | -1,05 |
| SL2126 | <i>yehA</i> | Uncharacterized protein <i>yehA</i> | -1,06 | 1,15 | 1,19 |
| SL2127 | <i>yehB</i> | Uncharacterized outer membrane usher protein <i>yehB</i> | 1,10 | -1,06 | 1,18 |
| SL2128 | <i>yehC</i> | Uncharacterized fimbrial chaperone <i>yehC</i> | 1,00 | -1,17 | -2,06 |
| SL2129 | <i>yehD</i> | Uncharacterized protein <i>yehD</i> | 1,02 | 1,12 | -1,04 |
| SL2130 | <i>yehE</i> | Uncharacterized protein <i>yehE</i> | -1,84 | -1,06 | -15,13 |
| SL2131 | <i>mrp</i> | Protein <i>mrp</i> | -1,02 | -1,04 | -1,27 |
| SL2132 | <i>metG</i> | Methionyl-tRNA synthetase | -1,14 | -1,04 | -1,54 |
| SL2133 | <i>yehR</i> | Uncharacterized lipoprotein <i>yehR</i> | 1,19 | 1,21 | -1,32 |
| SL2134 | <i>yehR</i> | Uncharacterized lipoprotein Lmo0207 | -1,12 | -1,13 | -1,68 |
| SL2135 | <i>yehS</i> | Uncharacterized protein <i>yehS</i> | 1,04 | -1,15 | -2,30 |
| SL2136 | <i>yehT</i> | Uncharacterized response regulatory protein <i>yehT</i> | 1,13 | 1,06 | 3,14 |
| SL2137 | <i>yehU</i> | Inner membrane protein <i>yehU</i> | -1,01 | -1,03 | 1,50 |
| SL2138 | <i>mlrA</i> | HTH-type transcriptional regulator <i>mlrA</i> | 1,15 | 1,35 | 1,56 |
| SL2139 | <i>yohO</i> | UPF0387 membrane protein <i>yohO</i> | 1,34 | 1,07 | 1,32 |
| SL2140 | <i>yehW</i> | Putative osmoprotectant uptake system permease protein <i>yehW</i> | 1,11 | -1,18 | 1,23 |
| SL2141 | <i>yehX</i> | Putative osmoprotectant uptake system ATP-binding protein <i>yehX</i> | 1,11 | -1,15 | 1,32 |
| SL2142 | <i>yehY</i> | Putative osmoprotectant uptake system permease protein <i>yehY</i> | 1,18 | -1,15 | 1,39 |
| SL2143 | <i>osmF</i> | Putative osmoprotectant uptake system substrate-binding protein <i>osmF</i> | 1,15 | 1,03 | 1,84 |
| SL2144 | <i>bgI</i> X | Periplasmic beta-glucosidase | -1,13 | -1,16 | -1,14 |
| SL2145 | <i>dld</i> | D-lactate dehydrogenase | 1,09 | -1,07 | 2,01 |
| SL2146 | <i>pbpG</i> | D-alanyl-D-alanine endopeptidase | 1,13 | 1,04 | -1,75 |
| SL2147 | <i>yohC</i> | Inner membrane protein <i>yohC</i> | 1,03 | 1,41 | 1,33 |
| SL2148 | <i>yohD</i> | Inner membrane protein <i>yohD</i> | 1,02 | 1,11 | 1,33 |
| SL2149 | <i>yohF</i> | Uncharacterized oxidoreductase <i>yohF</i> | 1,03 | -1,00 | 1,55 |
| SL2150 | <i>mdtQ</i> | Multidrug resistance outer membrane protein <i>mdtQ</i> | -1,36 | -1,08 | -1,12 |
| SL2151 | <i>dusC</i> | tRNA-dihydrouridine synthase C | -1,11 | -1,09 | -1,92 |
| SL2152 | <i>mhbM</i> | 3-hydroxybenzoate 6-hydroxylase | 1,16 | 1,06 | 2,31 |
| SL2153 | <i>maiA</i> | Probable maleylacetoacetate isomerase | 1,22 | 1,04 | 3,04 |
| SL2154 | <i>ycgM</i> | Uncharacterized protein PYRAB13970 | -1,01 | -1,03 | 3,97 |
| SL2155 | - | Gentisate 1,2-Dioxygenase | 1,03 | 1,05 | 5,13 |
| SL2156 | <i>pcaK</i> | 4-hydroxybenzoate transporter | -1,10 | -1,02 | 2,29 |
| SL2157 | <i>gbpR</i> | HTH-type transcriptional regulator <i>gbpR</i> | -1,37 | -1,28 | 2,35 |
| SL2158 | <i>yohJ</i> | UPF0299 membrane protein CKO_00648 | 1,00 | 1,05 | -11,34 |
| SL2159 | <i>yohK</i> | Inner membrane protein <i>yohK</i> | 1,04 | -1,03 | -12,19 |
| SL2160 | <i>cdd</i> | Cytidine deaminase | 1,03 | -1,06 | -8,24 |
| SL2161 | <i>sanA</i> | Protein <i>sanA</i> | -1,10 | -1,13 | -1,16 |
| SL2162 | <i>yeiS</i> | Uncharacterized protein <i>yeiS</i> | 1,00 | -1,02 | 1,40 |
| SL2163 | <i>yeiT</i> | Uncharacterized oxidoreductase <i>yeiT</i> | -1,08 | 1,11 | -1,15 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL2164 | <i>yeiA</i> | Uncharacterized protein <i>yeiA</i> | -1,11 | 1,13 | -1,48 |
| SL2165 | <i>mglC</i> | Galactoside transport system permease protein <i>mglC</i> | 1,03 | -1,75 | 6,61 |
| SL2166 | <i>mglA</i> | Galactose/methyl galactoside import ATP-binding protein <i>MglA</i> | -1,07 | -1,75 | 11,23 |
| SL2167 | <i>mglB</i> | D-galactose-binding periplasmic protein | 1,09 | -1,19 | 10,18 |
| SL2168 | <i>galS</i> | HTH-type transcriptional regulator <i>galS</i> | 1,09 | 1,13 | 1,68 |
| SL2169 | <i>yeiB</i> | Uncharacterized protein <i>yeiB</i> | -1,10 | -1,00 | -4,93 |
| SL2170 | <i>folE</i> | GTP cyclohydrolase 1 | 1,10 | 1,04 | -3,82 |
| SL2171 | <i>yeiG</i> | S-formylglutathione hydrolase <i>yeiG</i> | 1,06 | 1,05 | 2,13 |
| SL2172 | - | Transcriptional Regulator | 1,13 | 1,12 | 1,11 |
| SL2173 | <i>sdaA</i> | L-serine dehydratase 1 | 1,17 | 1,05 | 1,12 |
| SL2174 | <i>serB</i> | Phosphoserine phosphatase | -1,13 | -1,26 | 1,96 |
| SL2175 | <i>uhpC</i> | Regulatory protein <i>uhpC</i> | 1,13 | -1,03 | 2,60 |
| SL2176 | <i>cirA</i> | Colicin I receptor | 1,00 | 1,62 | -1,86 |
| SL2177 | <i>lysP</i> | Lysine-specific permease | 1,26 | -1,12 | -1,74 |
| SL2178 | <i>yeiE</i> | Uncharacterized HTH-type transcriptional regulator <i>yeiE</i> | 1,09 | 1,05 | 1,42 |
| SL2179 | <i>yeiH</i> | UPF0324 inner membrane protein <i>yeiH</i> | 1,13 | 1,21 | -2,57 |
| SL2180 | <i>nfo</i> | Probable endonuclease 4 | -1,23 | -1,31 | -1,63 |
| SL2181 | <i>fruA</i> | PTS system fructose-specific EIIBC component | 1,17 | 1,23 | -10,61 |
| SL2182 | <i>fruK</i> | 1-phosphofructokinase | 1,06 | 1,18 | -8,46 |
| SL2183 | <i>fruB</i> | Multiphosphoryl transfer protein | -1,06 | -1,02 | -6,16 |
| SL2184 | <i>setB</i> | Sugar efflux transporter B | -1,25 | -1,03 | -5,41 |
| SL2185 | <i>ykgH</i> | Hypothetical | 1,16 | 1,17 | -1,63 |
| SL2186 | - | Hypothetical | 1,19 | -1,00 | 1,09 |
| SL2187 | <i>yeiW</i> | UPF0153 protein <i>yeiW</i> | 1,15 | 1,16 | -1,77 |
| SL2188 | <i>yeiP</i> | Elongation factor P-like protein | -1,08 | -1,12 | -1,18 |
| SL2189 | <i>yeiR</i> | Uncharacterized protein <i>yeiR</i> | -1,09 | -1,15 | 1,23 |
| SL2190 | <i>yeiU</i> | Inner membrane protein <i>yeiU</i> | -1,14 | 1,09 | -2,33 |
| SL2191 | <i>spr</i> | Lipoprotein <i>spr</i> | -1,35 | 1,17 | -3,81 |
| SL2192 | <i>rtn</i> | Protein <i>rtn</i> | 1,25 | 1,16 | 1,27 |
| SL2193 | <i>yejA</i> | Uncharacterized protein <i>yejA</i> | 1,11 | 1,02 | -1,49 |
| SL2194 | <i>yejB</i> | Inner membrane ABC transporter permease protein <i>yejB</i> | 1,14 | -1,03 | -1,24 |
| SL2195 | <i>yejE</i> | Inner membrane ABC transporter permease protein <i>yejE</i> | 1,12 | 1,10 | -1,16 |
| SL2196 | <i>yejF</i> | Uncharacterized ABC transporter ATP-binding protein <i>yejF</i> | 1,13 | 1,10 | -1,05 |
| SL2197 | <i>yejG</i> | Uncharacterized protein <i>yejG</i> | -1,07 | 1,18 | -1,41 |
| SL2198 | <i>bcr</i> | Bicyclomycin resistance protein | 1,12 | -1,27 | -1,34 |
| SL2199 | <i>rsuA</i> | Ribosomal small subunit pseudouridine synthase A | 1,17 | 1,00 | -1,68 |
| SL2200 | <i>yejH</i> | Uncharacterized protein <i>yejH</i> | 1,19 | -1,15 | 1,04 |
| SL2201 | <i>rplY</i> | 50S ribosomal protein L25 | -1,05 | 1,01 | -1,57 |
| SL2202 | - | Hypothetical | 1,15 | 1,00 | -1,02 |
| SL2203 | <i>ndpA</i> | Nucleoid-associated protein <i>ndpA</i> | 1,12 | 1,03 | -1,18 |
| SL2204 | <i>yejL</i> | UPF0352 protein <i>yejL</i> | -1,17 | -1,16 | -2,47 |
| SL2205 | <i>yejM</i> | Inner membrane protein <i>yejM</i> | 1,01 | -1,05 | -2,01 |
| SL2206 | <i>umuD</i> | Protein <i>umuD</i> | -1,31 | -1,09 | -1,53 |
| SL2207 | <i>msgA</i> | Virulence protein <i>msgA</i> | -1,06 | -1,35 | -1,68 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-------------------|-------------------|-----------------------|
| SL2208 | <i>yrhL</i> | Putative peptidoglycan O-acetyltransferase <i>yrhL</i> | -1,29 | -1,71 | 1,10 |
| SL2209 | <i>yfdK</i> | Uncharacterized protein <i>yfdK</i> | 1,03 | 1,10 | 1,10 |
| SL2210 | - | Hypothetical | 1,09 | 1,13 | 1,19 |
| SL2211 | <i>ycfK</i> | Uncharacterized protein <i>ycfK</i> | 1,01 | 1,01 | -1,12 |
| SL2212 | - | Prohead Protease | 1,04 | 1,13 | -2,07 |
| SL2213 | - | Hypothetical | 1,16 | -1,13 | -2,23 |
| SL2214 | <i>pifA</i> | KAP P-Loop Domain-Containing Protein | -1,29 | -1,52 | 2,07 |
| SL2215 | <i>quuD</i> | Antitermination protein Q homolog from lambdoid prophage DLP12 | -1,17 | 1,07 | 1,18 |
| SL2216 | <i>ydfU</i> | Uncharacterized protein <i>ydfU</i> | -1,13 | -1,15 | 1,52 |
| SL2217 | <i>sspH2</i> | E3 ubiquitin-protein ligase <i>sspH2</i> | -1,06 | -1,09 | -1,54 |
| SL2218 | - | Bacteriophage Tail Fiber Assembly Protein | -1,32 | 1,01 | -1,96 |
| SL2219 | <i>stfR</i> | Side Tail Fiber Protein | -1,38 | 1,13 | -1,40 |
| SL2220 | - | Homolog Of Virulence Protein <i>MsgA</i> | -1,66 | 1,18 | -2,64 |
| SL2221 | - | Conserved Hypothetical Protein | -2,49 | 1,39 | -2,04 |
| SL2222 | <i>narP</i> | Nitrate/nitrite response regulator protein <i>narP</i> | -1,32 | -1,28 | -1,33 |
| SL2223 | <i>ccmH</i> | Cytochrome c-type biogenesis protein <i>ccmH</i> | -1,11 | -1,13 | 1,27 |
| SL2224 | <i>ccmAE</i> | Putative bifunctional cytochrome c-type biogenesis protein <i>ccmAE</i> | -1,01 | 1,06 | -1,66 |
| SL2225 | <i>napC</i> | Cytochrome c-type protein <i>napC</i> | 1,06 | -1,02 | 2,49 |
| SL2226 | <i>napB</i> | Diheme cytochrome c <i>napB</i> | 1,06 | -1,08 | 1,77 |
| SL2227 | <i>napH</i> | Ferredoxin-type protein <i>napH</i> | 1,02 | -1,02 | 2,21 |
| SL2228 | <i>napG</i> | Ferredoxin-type protein <i>napG</i> | 1,15 | -1,12 | 2,65 |
| SL2229 | <i>napA</i> | Periplasmic nitrate reductase | 1,17 | -1,04 | 3,48 |
| SL2230 | <i>napD</i> | Protein <i>napD</i> | 1,12 | -1,46 | -1,16 |
| SL2231 | <i>napF</i> | Ferredoxin-type protein <i>napF</i> | 1,18 | 1,31 | 1,09 |
| SL2232 | <i>eco</i> | Ecotin | 1,16 | 1,13 | 1,64 |
| SL2233 | <i>yojI</i> | ABC transporter ATP-binding protein <i>yojI</i> | 1,08 | 1,30 | -1,74 |
| SL2234 | <i>alkB</i> | Alpha-ketoglutarate-dependent dioxygenase <i>AlkB</i> | 1,16 | 1,26 | 1,76 |
| SL2235 | <i>ada</i> | Regulatory protein <i>ada</i> | 1,17 | 1,27 | 1,84 |
| SL2236 | <i>apbE</i> | Thiamine biosynthesis lipoprotein <i>ApbE</i> | 1,15 | 1,13 | 1,05 |
| SL2237 | <i>ompC</i> | Outer membrane protein C | 1,00 | 1,02 | -1,03 |
| SL2238 | <i>yojN</i> | Hypothetical Protein <i>yojN</i> | -1,02 | 1,15 | -1,55 |
| SL2239 | <i>rcsB</i> | Capsular synthesis regulator component B | -1,03 | 1,12 | -1,71 |
| SL2240 | <i>rcsC</i> | Sensor protein <i>rcsC</i> | 1,05 | -1,28 | -1,14 |
| SL2241 | <i>gyrA</i> | DNA gyrase subunit A | 1,01 | -1,21 | -1,34 |
| SL2242 | <i>dgoD</i> | D-galactonate dehydratase | -1,07 | 1,11 | 1,84 |
| SL2243 | <i>ttuB</i> | Putative tartrate transporter | 1,05 | -1,13 | 3,31 |
| SL2244 | <i>ntaR</i> | Nta operon transcriptional regulator | 1,14 | -1,14 | 1,71 |
| SL2245 | <i>ubiG</i> | 3-demethylubiquinone-9 3-methyltransferase | 1,07 | 1,12 | -1,29 |
| SL2246 | <i>nrdA</i> | Ribonucleoside-diphosphate reductase 1 subunit alpha | -1,04 | -1,21 | -1,72 |
| SL2247 | <i>nrdB</i> | Ribonucleoside-diphosphate reductase 1 subunit beta | 1,08 | -1,08 | 1,05 |
| SL2248 | <i>yfaE</i> | Uncharacterized ferredoxin-like protein <i>yfaE</i> | 1,17 | -1,21 | -1,30 |
| SL2249 | <i>ywoG</i> | Uncharacterized MFS-type transporter <i>ywoG</i> | 1,12 | -1,04 | -1,92 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-------------------|-------------------|-----------------------|
| SL2250 | <i>yvbU</i> | Uncharacterized HTH-type transcriptional regulator <i>yvbU</i> | 1,24 | -1,04 | 1,11 |
| SL2251 | <i>glpQ</i> | Glycerophosphoryl diester phosphodiesterase | 1,05 | -1,09 | -1,04 |
| SL2252 | <i>glpT</i> | Glycerol-3-phosphate transporter | 1,00 | -1,07 | 1,01 |
| SL2253 | <i>glpA</i> | Anaerobic glycerol-3-phosphate dehydrogenase subunit A | 1,19 | 1,22 | 1,01 |
| SL2254 | <i>glpB</i> | Anaerobic glycerol-3-phosphate dehydrogenase subunit B | 1,14 | 1,10 | -1,11 |
| SL2255 | <i>glpC</i> | Anaerobic glycerol-3-phosphate dehydrogenase subunit C | 1,09 | 1,04 | -1,28 |
| SL2256 | <i>sseL</i> | Deubiquitinase <i>sseL</i> | -7,62 | 1,57 | -9,57 |
| SL2257 | <i>cinA</i> | CinA-like protein | 1,33 | 1,03 | 1,80 |
| SL2258 | <i>yfaU</i> | 2-keto-3-deoxy-L-rhamnonate aldolase | 1,38 | 1,15 | 1,99 |
| SL2259 | <i>yfaV</i> | Inner membrane transport protein <i>yfaV</i> | 1,50 | 1,14 | 1,29 |
| SL2260 | <i>yfaW</i> | L-rhamnonate dehydratase | 1,21 | 1,11 | 1,37 |
| SL2261 | <i>yfaX</i> | Uncharacterized HTH-type transcriptional regulator <i>yfaX</i> | 1,42 | 1,43 | 2,53 |
| SL2262 | <i>cinA</i> | CinA-like protein | -1,07 | -1,08 | 1,18 |
| SL2263 | <i>yfaZ</i> | Uncharacterized protein <i>yfaZ</i> | -1,21 | -1,04 | -1,52 |
| SL2264 | <i>nudl</i> | Nucleoside triphosphatase <i>nudl</i> | -1,16 | -1,05 | 1,24 |
| SL2265 | <i>ais</i> | Lipopolysaccharide core heptose(II)-phosphate phosphatase | -1,34 | 1,08 | -4,74 |
| SL2266 | <i>arnB</i> | UDP-4-amino-4-deoxy-L-arabinose--oxoglutarate aminotransferase | -1,29 | 1,15 | -2,44 |
| SL2267 | <i>arnC</i> | Undecaprenyl-phosphate 4-deoxy-4-formamido-L-arabinose transferase | -1,49 | -1,03 | -2,05 |
| SL2268 | <i>arnA</i> | Bifunctional polymyxin resistance protein ArnA | -1,48 | -1,12 | -1,73 |
| SL2269 | <i>arnD</i> | Probable 4-deoxy-4-formamido-L-arabinose-phosphoundecaprenol deformylase ArnD | -1,35 | -1,10 | -2,06 |
| SL2270 | <i>arnT</i> | Undecaprenyl phosphate-alpha-4-amino-4-deoxy-L-arabinose arabinosyl transferase | -1,32 | -1,01 | -2,12 |
| SL2271 | <i>arnE</i> | Probable 4-amino-4-deoxy-L-arabinose-phosphoundecaprenol flippase subunit ArnE | 1,11 | 1,37 | -1,89 |
| SL2272 | <i>arnF</i> | Probable 4-amino-4-deoxy-L-arabinose-phosphoundecaprenol flippase subunit ArnF | -1,17 | 1,24 | -2,31 |
| SL2273 | <i>pmrD</i> | Signal transduction protein pmrD | -1,12 | 1,28 | -1,44 |
| SL2274 | <i>menE</i> | 2-succinylbenzoate--CoA ligase | 1,19 | -1,15 | -1,31 |
| SL2275 | <i>menC</i> | o-succinylbenzoate synthase | 1,30 | -1,10 | 1,05 |
| SL2276 | <i>menB</i> | Naphthoate synthase | 1,21 | -1,07 | -1,01 |
| SL2277 | <i>menH</i> | 2-succinyl-6-hydroxy-2,4-cyclohexadiene-1-carboxylate synthase | 1,44 | 1,02 | -2,59 |
| SL2278 | <i>menD</i> | 2-succinyl-5-enolpyruvyl-6-hydroxy-3-cyclohexene-1-carboxylate synthase | 1,09 | 1,20 | -1,85 |
| SL2279 | <i>menF</i> | Menaquinone-specific isochorismate synthase | -1,00 | -1,05 | -2,16 |
| SL2280 | <i>elaB</i> | Protein <i>elaB</i> | -1,05 | 1,02 | 1,73 |
| SL2281 | <i>elaA</i> | Protein <i>elaA</i> | -1,04 | 1,01 | 1,91 |
| SL2282 | <i>rnz</i> | Ribonuclease Z | 1,07 | -1,19 | 1,08 |
| SL2283 | <i>cheV</i> | Chemotaxis protein <i>cheV</i> | -1,26 | -1,24 | -10,75 |
| SL2284 | <i>yfbK</i> | Uncharacterized protein <i>yfbK</i> | 1,05 | -1,11 | -2,45 |
| SL2285 | <i>nuoN</i> | NADH-quinone oxidoreductase subunit N | 1,11 | -1,19 | 1,42 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL2286 | <i>nuoM</i> | NADH-quinone oxidoreductase subunit M | 1,09 | -1,07 | 1,38 |
| SL2287 | <i>nuoL</i> | NADH-quinone oxidoreductase subunit L | 1,04 | -1,10 | 1,99 |
| SL2288 | <i>nuoK</i> | NADH-quinone oxidoreductase subunit K | 1,03 | -1,13 | 2,30 |
| SL2289 | <i>nuoJ</i> | NADH-quinone oxidoreductase subunit J | 1,08 | -1,05 | 1,84 |
| SL2290 | <i>nuoI</i> | NADH-quinone oxidoreductase subunit I | 1,02 | -1,10 | 1,99 |
| SL2291 | <i>nuoH</i> | NADH-quinone oxidoreductase subunit H | 1,09 | -1,12 | 1,93 |
| SL2292 | <i>nuoG</i> | NADH-quinone oxidoreductase subunit G | 1,01 | -1,06 | 1,69 |
| SL2293 | <i>nuoF</i> | NADH-quinone oxidoreductase subunit F | 1,13 | -1,14 | 1,95 |
| SL2294 | <i>nuoE</i> | NADH-quinone oxidoreductase subunit E | 1,06 | -1,16 | 1,32 |
| SL2295 | <i>nuoC</i> | NADH-quinone oxidoreductase subunit C/D | -1,01 | -1,26 | -1,07 |
| SL2296 | <i>nuoB</i> | NADH-quinone oxidoreductase subunit B | 1,01 | -1,07 | -1,27 |
| SL2297 | <i>nuoA</i> | NADH-quinone oxidoreductase subunit A | -1,05 | -1,03 | -1,37 |
| SL2298 | - | Hypothetical | -1,07 | 1,30 | -1,86 |
| SL2299 | <i>lrhA</i> | Probable HTH-type transcriptional regulator lrhA | -1,35 | 1,08 | -2,65 |
| SL2300 | <i>yfbQ</i> | Uncharacterized aminotransferase yfbQ | -1,15 | -1,01 | -1,62 |
| SL2301 | <i>yfbR</i> | UPF0207 protein KPK_1466 | -1,06 | -1,05 | -1,02 |
| SL2302 | <i>yfbS</i> | Uncharacterized transporter yfbS | 1,19 | 1,06 | 1,01 |
| SL2303 | <i>yfbT</i> | Phosphatase yfbT | 1,11 | 1,04 | -1,15 |
| SL2304 | <i>yfbU</i> | UPF0304 protein yfbU | 1,03 | 1,02 | 1,13 |
| SL2305 | <i>yfbV</i> | UPF0208 membrane protein yfbV | -1,17 | -1,00 | -2,12 |
| SL2306 | <i>ackA</i> | Acetate kinase | -1,09 | -1,09 | -3,07 |
| SL2307 | <i>pta</i> | Phosphate acetyltransferase | 1,04 | -1,15 | -1,77 |
| SL2308 | <i>yfcC</i> | Uncharacterized protein yfcC | 1,14 | -1,21 | -2,45 |
| SL2309 | <i>dxs</i> | Putative transketolase C-terminal section | 1,04 | -1,22 | 1,97 |
| SL2310 | <i>tktA</i> | Putative transketolase N-terminal section | 1,13 | -1,04 | 1,67 |
| SL2311 | <i>ulaA</i> | Ascorbate-specific permease IIC component ulAA | 1,08 | -1,02 | 2,27 |
| SL2312 | - | Hypothetical | -1,02 | -1,08 | 2,94 |
| SL2313 | <i>ulaC</i> | Ascorbate-specific phosphotransferase enzyme IIA component | -1,14 | -1,17 | 3,39 |
| SL2314 | <i>gntR</i> | HTH-type transcriptional regulator gntR | 1,29 | 1,15 | 1,45 |
| SL2315 | <i>yfcD</i> | Uncharacterized Nudix hydrolase yfcD | -1,07 | -1,07 | -1,28 |
| SL2316 | <i>yfcE</i> | Phosphodiesterase yfcE | -1,12 | -1,14 | -1,34 |
| SL2317 | <i>yfcF</i> | Uncharacterized GST-like protein yfcF | 1,03 | 1,19 | 1,15 |
| SL2318 | <i>yfcG</i> | Uncharacterized GST-like protein yfcG | -1,05 | -1,17 | 1,14 |
| SL2319 | <i>yfcH</i> | Epimerase family protein yfcH | 1,40 | 1,21 | 1,77 |
| SL2320 | <i>hisP</i> | Histidine transport ATP-binding protein hisP | 1,08 | -1,10 | 1,04 |
| SL2321 | <i>hisM</i> | Histidine transport system permease protein hisM | 1,13 | -1,04 | 1,12 |
| SL2322 | <i>hisQ</i> | Histidine transport system permease protein hisQ | 1,21 | -1,07 | 1,08 |
| SL2323 | <i>hisJ</i> | Histidine-binding periplasmic protein | -1,05 | -1,15 | 2,32 |
| SL2324 | <i>argT</i> | Lysine-arginine-ornithine-binding periplasmic protein | -1,15 | 1,01 | 7,89 |
| SL2325 | <i>ubiX</i> | 3-octaprenyl-4-hydroxybenzoate carboxy-lyase | -1,04 | -1,06 | -1,66 |
| SL2326 | <i>rocC</i> | Amino-acid permease rocC | 1,06 | 1,04 | -1,18 |
| SL2327 | - | Amino Acid Racemase | 1,18 | 1,13 | 2,86 |
| SL2328 | <i>xasA</i> | Uncharacterized transporter lpg1691 | -1,05 | 1,15 | 1,86 |
| SL2329 | <i>lysA</i> | Diaminopimelate decarboxylase | 1,22 | 1,48 | 1,50 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL2330 | <i>rocR</i> | Arginine utilization regulatory protein rocR | 1,21 | 1,43 | 1,99 |
| SL2331 | <i>purF</i> | Amidophosphoribosyltransferase | -1,01 | 1,09 | -1,24 |
| SL2332 | <i>cvpA</i> | Colicin V production protein | 1,09 | 1,21 | -1,46 |
| SL2333 | <i>dedD</i> | Protein dedD | -1,11 | -1,08 | -1,77 |
| SL2334 | <i>folC</i> | Bifunctional protein folC | -1,00 | -1,11 | -1,60 |
| SL2335 | <i>accD</i> | Acetyl-coenzyme A carboxylase carboxyl transferase subunit beta | 1,16 | 1,20 | -1,67 |
| SL2336 | <i>dedA</i> | Protein dedA | 1,22 | 1,16 | -1,32 |
| SL2337 | <i>truA</i> | tRNA pseudouridine synthase A | 1,18 | -1,11 | -1,17 |
| SL2338 | <i>usg</i> | USG-1 protein | 1,01 | -1,05 | -1,45 |
| SL2339 | <i>pdxB</i> | Erythronate-4-phosphate dehydrogenase | -1,02 | -1,07 | -2,04 |
| SL2340 | <i>flk</i> | Flagellar regulator flk | -1,01 | 1,03 | -1,91 |
| SL2341 | <i>yfcJ</i> | UPF0226 membrane protein SARI_00527 | -1,10 | -1,09 | -1,53 |
| SL2342 | - | Bacteriophage Protein | 1,02 | 1,11 | -1,38 |
| SL2343 | <i>sfsB</i> | Sugar fermentation stimulation protein B | 1,04 | -1,01 | -1,02 |
| SL2344 | - | Hypothetical | 1,13 | 1,02 | 1,06 |
| SL2345 | - | Hypothetical | 1,05 | 1,01 | 1,06 |
| SL2346 | - | Uncharacterized 24.3 kDa protein | 1,20 | 1,05 | -1,17 |
| SL2347 | <i>fabB</i> | 3-oxoacyl-[acyl-carrier-protein] synthase 1 | -1,09 | -1,26 | 1,11 |
| SL2348 | <i>mnmC</i> | tRNA 5-methylaminomethyl-2-thiouridine biosynthesis bifunctional protein mnmC | 1,02 | -1,02 | 1,03 |
| SL2349 | <i>yfcL</i> | Uncharacterized protein yfcL | 1,12 | 1,02 | -1,13 |
| SL2350 | <i>yfcM</i> | Uncharacterized protein yfcM | -1,06 | -1,31 | -1,11 |
| SL2351 | <i>yfcA</i> | UPF0721 transmembrane protein yfcA | -1,08 | -1,19 | -1,24 |
| SL2352 | <i>mepA</i> | Penicillin-insensitive murein endopeptidase | -1,08 | -1,21 | 1,27 |
| SL2353 | <i>aroC</i> | Chorismate synthase | -1,10 | -1,18 | 1,39 |
| SL2354 | <i>yfcB</i> | Uncharacterized adenine-specific methylase yfcB | -1,24 | -1,13 | -1,03 |
| SL2355 | <i>yfcN</i> | UPF0115 protein KPK_1418 | 1,36 | 1,06 | -1,06 |
| SL2356 | <i>sixA</i> | Phosphohistidine phosphatase sixA | -1,03 | 1,16 | -1,32 |
| SL2357 | <i>fadJ</i> | Fatty acid oxidation complex subunit alpha | -1,03 | 1,15 | 4,65 |
| SL2358 | <i>fadI</i> | 3-ketoacyl-CoA thiolase | 1,09 | 1,26 | 2,24 |
| SL2359 | <i>yfcZ</i> | UPF0381 protein yfcZ | 1,02 | 1,31 | -1,84 |
| SL2360 | <i>fadL</i> | Long-chain fatty acid transport protein | -1,14 | 1,08 | 7,09 |
| SL2361 | <i>mlaA</i> | Probable phospholipid-binding lipoprotein mlaA | -1,20 | -1,07 | -1,42 |
| SL2362 | <i>yfdC</i> | Inner membrane protein yfdC | 1,06 | 1,22 | 1,40 |
| SL2363 | <i>pgtE</i> | Outer membrane protease E | -2,81 | 1,47 | -2,42 |
| SL2364 | <i>pgtA</i> | Phosphoglycerate transport system transcriptional regulatory protein pgtA | 1,10 | 1,00 | -1,35 |
| SL2365 | <i>pgtB</i> | Phosphoglycerate transport system sensor protein pgtB | 1,13 | 1,15 | -1,88 |
| SL2366 | <i>pgtC</i> | Phosphoglycerate transport regulatory protein pgtC | 1,25 | 1,46 | 1,18 |
| SL2367 | <i>pgtP</i> | Phosphoglycerate transporter protein | 1,36 | 1,62 | 2,39 |
| SL2368 | <i>yfdY</i> | Uncharacterized protein yfdY | 1,75 | 1,30 | 1,94 |
| SL2369 | <i>ddg</i> | Protein ddg | -1,46 | -1,05 | -11,56 |
| SL2370 | <i>yfdZ</i> | Uncharacterized aminotransferase yfdZ | 1,11 | 1,12 | 1,13 |
| SL2371 | <i>glk</i> | Glucokinase | 1,03 | -1,07 | 1,06 |
| SL2372 | <i>yfeO</i> | Putative ion-transport protein yfeO | 1,03 | 1,07 | 1,06 |
| SL2373 | <i>ipdC</i> | Indole-3-pyruvate decarboxylase | 1,14 | 1,25 | 1,97 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>greA</i> vs | <i>greB</i> vs | <i>greAgreB</i> |
|--------|-------------|--|----------------|----------------|-----------------|
| | | | WT | WT | vs WT |
| SL2374 | <i>yghZ</i> | Uncharacterized protein <i>yghZ</i> | 1,19 | 1,27 | 1,19 |
| SL2375 | <i>ypeC</i> | Uncharacterized protein <i>ypeC</i> | 1,03 | 1,16 | -1,39 |
| SL2376 | <i>mntH</i> | Manganese transport protein <i>mntH</i> | 1,04 | 1,05 | -1,03 |
| SL2377 | <i>nupC</i> | Nucleoside permease <i>nupC</i> | -1,00 | -1,03 | 1,23 |
| SL2378 | <i>yfeA</i> | Uncharacterized protein <i>yfeA</i> | -1,11 | -1,04 | -2,35 |
| SL2379 | <i>yfeC</i> | Uncharacterized protein <i>yfeC</i> | 1,31 | 1,08 | 1,46 |
| SL2380 | <i>yfeD</i> | Uncharacterized protein <i>yfeD</i> | 1,50 | 1,35 | 1,87 |
| SL2381 | <i>gltX</i> | Glutamyl-tRNA synthetase | 1,02 | -1,05 | -1,53 |
| SL2382 | <i>xapR</i> | HTH-type transcriptional regulator <i>xapR</i> | 1,15 | -1,11 | -1,19 |
| SL2383 | - | Hypothetical N | 1,21 | 1,10 | 1,01 |
| SL2384 | <i>xapB</i> | Xanthosine permease | -1,16 | 1,29 | -1,13 |
| SL2385 | <i>xapA</i> | Xanthosine phosphorylase | -1,25 | 1,08 | -1,57 |
| SL2386 | <i>yfeN</i> | Uncharacterized protein <i>yfeN</i> | -1,13 | -1,23 | -1,03 |
| SL2387 | <i>yfeR</i> | Uncharacterized HTH-type transcriptional regulator <i>yfeR</i> | -1,09 | -1,25 | 1,35 |
| SL2388 | <i>yfeH</i> | Uncharacterized protein <i>yfeH</i> | 1,12 | -1,04 | -1,38 |
| SL2389 | <i>ypeB</i> | Uncharacterized protein <i>ypeB</i> | 1,13 | -1,08 | 1,08 |
| SL2390 | <i>ligA</i> | DNA ligase | 1,06 | -1,06 | 1,11 |
| SL2391 | <i>zipA</i> | Cell division protein <i>zipA</i> homolog | -1,15 | 1,20 | -1,54 |
| SL2392 | <i>cysZ</i> | Protein <i>cysZ</i> homolog | 1,04 | 1,21 | -1,89 |
| SL2393 | <i>cysK</i> | Cysteine synthase A | 1,11 | 1,01 | 2,16 |
| SL2394 | <i>ptsH</i> | Phosphocarrier protein HPr | -1,02 | -1,12 | -1,17 |
| SL2395 | <i>ptsI</i> | Phosphoenolpyruvate-protein phosphotransferase | 1,05 | 1,00 | -1,26 |
| SL2396 | <i>crr</i> | Glucose-specific phosphotransferase enzyme IIA component | 1,08 | 1,02 | 1,16 |
| SL2397 | - | Hypothetical | 1,07 | 1,16 | 1,03 |
| SL2398 | <i>pdxK</i> | Pyridoxine kinase | -1,19 | 1,11 | 1,25 |
| SL2399 | <i>ptsJ</i> | Putative transcriptional regulatory protein <i>ptsJ</i> | -1,34 | -1,19 | -1,19 |
| SL2400 | <i>yfeJ</i> | Putative glutamine amidotransferase-like protein <i>yfeJ</i> | -1,12 | -1,05 | 1,75 |
| SL2401 | <i>yfeK</i> | Uncharacterized protein <i>yfeK</i> | 1,12 | 1,03 | 1,15 |
| SL2402 | <i>yfeL</i> | Uncharacterized protein <i>yfeL</i> | 1,15 | 1,23 | -1,19 |
| SL2403 | <i>cysM</i> | Cysteine synthase B | 1,20 | 1,19 | 1,54 |
| SL2404 | <i>cysA</i> | Sulfate/thiosulfate import ATP-binding protein <i>cysA</i> | 1,55 | 1,39 | 12,67 |
| SL2405 | <i>cysW</i> | Sulfate transport system permease protein <i>cysW</i> | 1,09 | -1,12 | 6,01 |
| SL2406 | <i>cysU</i> | Sulfate transport system permease protein <i>cysT</i> | 1,34 | 1,03 | 8,74 |
| SL2407 | <i>cysP</i> | Thiosulfate-binding protein | -1,07 | -1,31 | 13,02 |
| SL2408 | <i>ucpA</i> | Oxidoreductase <i>ucpA</i> | 1,35 | 1,16 | 3,08 |
| SL2409 | <i>yfeX</i> | Uncharacterized protein <i>yfeX</i> | 1,30 | 1,04 | -1,32 |
| SL2410 | <i>yfeY</i> | Uncharacterized protein <i>yfeY</i> | -1,10 | -1,32 | -1,20 |
| SL2411 | <i>yfeZ</i> | Inner membrane protein <i>yfeZ</i> | -1,01 | -1,14 | -1,29 |
| SL2412 | <i>ypeA</i> | Acetyltransferase <i>ypeA</i> | -1,05 | -1,07 | -1,48 |
| SL2413 | <i>amiA</i> | Probable N-acetylmuramoyl-L-alanine amidase AmiA | -1,12 | -1,14 | -1,89 |
| SL2414 | <i>hemF</i> | Coproporphyrinogen-III oxidase, aerobic | -1,12 | -1,12 | -1,84 |
| SL2415 | <i>ypfK</i> | Uncharacterized protein <i>ypfK</i> | 1,47 | 1,24 | -1,32 |
| SL2416 | <i>ypfL</i> | Uncharacterized protein <i>ypfL</i> | -1,08 | -1,21 | -1,34 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL2417 | <i>eutR</i> | HTH-type transcriptional regulator eutR | -1,01 | -1,07 | -1,22 |
| SL2418 | <i>eutK</i> | Ethanolamine utilization protein eutK | 1,05 | 1,14 | -1,20 |
| SL2419 | <i>eutL</i> | Ethanolamine utilization protein eutL | -1,08 | 1,11 | 1,13 |
| SL2420 | <i>eutC</i> | Ethanolamine ammonia-lyase light chain | -1,02 | 1,12 | 1,12 |
| SL2421 | <i>eutB</i> | Ethanolamine ammonia-lyase heavy chain | -1,03 | 1,10 | 1,27 |
| SL2422 | <i>eutA</i> | Ethanolamine utilization protein eutA | -1,25 | -1,01 | -1,05 |
| SL2423 | <i>eutH</i> | Ethanolamine utilization protein eutH | -1,11 | 1,21 | -1,02 |
| SL2424 | <i>eutG</i> | Ethanolamine utilization protein eutG | -1,06 | 1,01 | -1,09 |
| SL2425 | <i>eutJ</i> | Ethanolamine utilization protein eutJ | -1,15 | 1,18 | -1,42 |
| SL2426 | <i>eutE</i> | Ethanolamine utilization protein eutE | -1,16 | -1,07 | -1,29 |
| SL2427 | <i>eutN</i> | Ethanolamine utilization protein eutN | -1,45 | -1,19 | -1,11 |
| SL2428 | <i>eutM</i> | Ethanolamine utilization protein eutM | -1,23 | 1,04 | -1,05 |
| SL2429 | <i>eutD</i> | Ethanolamine utilization protein eutD | -1,14 | -1,21 | -1,39 |
| SL2430 | <i>eutT</i> | Ethanolamine utilization cobalamin adenosyltransferase | -1,46 | -1,07 | 1,09 |
| SL2431 | <i>eutQ</i> | Ethanolamine utilization protein eutQ | -1,24 | 1,18 | 1,59 |
| SL2432 | <i>eutP</i> | Ethanolamine utilization protein eutP | -1,30 | 1,35 | 2,01 |
| SL2433 | <i>eutS</i> | Ethanolamine utilization protein eutS | -1,02 | 1,75 | 1,70 |
| SL2435 | <i>maeB</i> | NADP-dependent malic enzyme | 1,15 | -1,08 | 5,97 |
| SL2436 | <i>tal2</i> | Transaldolase 2 | -1,04 | -1,00 | 1,53 |
| SL2437 | <i>tktB</i> | Transketolase 2 | 1,18 | 1,11 | 2,01 |
| SL2438 | - | Hypothetical | -1,08 | -1,04 | -2,50 |
| SL2439 | <i>ypfG</i> | Uncharacterized protein ypfG | 1,12 | 1,41 | -2,79 |
| SL2440 | <i>nudK</i> | GDP-mannose pyrophosphatase nudK | -1,07 | -1,10 | -1,43 |
| SL2441 | <i>yfeW</i> | UPF0214 protein yfeW | -1,11 | 1,12 | -1,61 |
| SL2442 | <i>aegA</i> | Protein AegA | -1,03 | -1,06 | 1,13 |
| SL2443 | <i>narQ</i> | Nitrate/nitrite sensor protein narQ | 1,17 | 1,31 | -1,27 |
| SL2444 | <i>acrD</i> | Probable aminoglycoside efflux pump | 1,30 | -1,02 | -1,21 |
| SL2445 | <i>yffB</i> | Protein yffB | -1,03 | -1,26 | -1,06 |
| SL2446 | <i>dapE</i> | Succinyl-diaminopimelate desuccinylase | -1,18 | -1,27 | -1,18 |
| SL2447 | - | UPF0370 protein YpsIP31758_1253 | 1,06 | -1,02 | 1,21 |
| SL2448 | <i>ypfI</i> | Uncharacterized protein ypfI | 1,22 | 1,07 | 1,11 |
| SL2449 | <i>ypfJ</i> | Uncharacterized protein ypfJ | -1,07 | 1,24 | 1,29 |
| SL2450 | <i>purC</i> | Phosphoribosylaminoimidazole-succinocarboxamide synthase | -1,06 | -1,03 | -1,20 |
| SL2451 | <i>nlpB</i> | Lipoprotein 34 | -1,02 | -1,34 | -1,89 |
| SL2452 | <i>dapA</i> | Dihydrodipicolinate synthase | 1,02 | -1,21 | -1,83 |
| SL2453 | <i>gcvR</i> | Glycine cleavage system transcriptional repressor | -1,13 | -1,19 | -1,08 |
| SL2454 | <i>bcp</i> | Putative peroxiredoxin bcp | -1,02 | -1,18 | 1,33 |
| SL2455 | <i>garK</i> | Glycerate Kinase | 1,12 | -1,18 | 1,33 |
| SL2456 | <i>perM</i> | Putative permease perM | 1,02 | -1,04 | -1,67 |
| SL2457 | <i>yfgC</i> | TPR repeat-containing protein yfgC | -1,01 | 1,07 | -1,12 |
| SL2458 | <i>yfgD</i> | Uncharacterized protein yfgD | 1,09 | -1,02 | 1,19 |
| SL2459 | <i>hda</i> | DnaA-homolog protein hda | -1,01 | 1,00 | -2,04 |
| SL2460 | <i>uraA</i> | Uracil permease | -1,07 | -1,05 | 1,59 |
| SL2461 | <i>upp</i> | Uracil phosphoribosyltransferase | -1,02 | 1,28 | -1,14 |
| SL2462 | <i>purM</i> | Phosphoribosylformylglycinamide cyclo-ligase | -1,04 | 1,28 | -2,28 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-------------------|-------------------|-----------------------|
| SL2463 | <i>purN</i> | Phosphoribosylglycinamide formyltransferase | 1,14 | 1,09 | -2,33 |
| SL2464 | <i>ppk</i> | Polyphosphate kinase | 1,07 | -1,05 | 1,32 |
| SL2465 | <i>ppx</i> | Exopolyphosphatase | 1,03 | -1,25 | 1,09 |
| SL2466 | <i>yfgF</i> | Inner membrane protein yfgF | -1,12 | -1,02 | -1,90 |
| SL2467 | - | Hypothetical | -1,23 | -1,01 | -3,33 |
| SL2468 | <i>yfgG</i> | Uncharacterized protein yfgG | 1,01 | 1,01 | -3,19 |
| SL2469 | - | Hypothetical | 1,52 | 1,35 | -2,17 |
| SL2470 | <i>insF1</i> | Transposase insF for insertion sequence IS3A | 1,48 | 1,33 | -1,86 |
| SL2471 | <i>guaA</i> | GMP synthase [glutamine-hydrolyzing] | 1,01 | 1,02 | -2,32 |
| SL2472 | <i>guaB</i> | Inosine-5'-monophosphate dehydrogenase | -1,09 | 1,02 | -3,20 |
| SL2473 | <i>xseA</i> | Exodeoxyribonuclease 7 large subunit | -1,13 | -1,03 | -2,01 |
| SL2474 | <i>yuaQ</i> | Uncharacterized protein yuaQ | 1,03 | -1,02 | 1,78 |
| SL2475 | - | Invasin | 1,34 | 1,31 | 1,32 |
| SL2476 | - | Invasin | 1,00 | -1,17 | 1,12 |
| SL2477 | - | Invasin | 1,38 | 1,28 | 1,42 |
| SL2478 | - | Outer Membrane Protein | 1,21 | 1,13 | 2,39 |
| SL2479 | <i>eae</i> | Intimin | 1,06 | 1,22 | -1,18 |
| SL2480 | <i>yfgJ</i> | Uncharacterized protein yfgJ | 1,06 | -1,08 | -1,51 |
| SL2481 | <i>engA</i> | GTP-binding protein engA | 1,09 | 1,02 | -1,82 |
| SL2482 | <i>yfgL</i> | Lipoprotein yfgL | 1,05 | -1,15 | -1,46 |
| SL2483 | <i>yfgM</i> | UPF0070 protein yfgM | 1,06 | -1,12 | -1,65 |
| SL2484 | <i>hisS</i> | Histidyl-tRNA synthetase | -1,02 | -1,10 | -2,15 |
| SL2485 | <i>ispG</i> | 4-hydroxy-3-methylbut-2-en-1-yl diphosphate synt | 1,07 | 1,14 | -1,05 |
| SL2486 | <i>rodZ</i> | Cytoskeleton protein rodZ | 1,12 | 1,21 | -1,60 |
| SL2487 | <i>rlnN</i> | Ribosomal RNA large subunit methyltransferase N | 1,09 | 1,11 | -1,53 |
| SL2488 | <i>ndk</i> | Nucleoside diphosphate kinase | 1,18 | 1,01 | 6,14 |
| SL2489 | <i>ysaA</i> | Polyferredoxin | 1,30 | -1,29 | -1,82 |
| SL2490 | <i>dmsC</i> | Anaerobic Dimethyl Sulfoxide Reductase Subunit | 1,18 | -1,42 | 1,02 |
| SL2491 | <i>dmsB</i> | Anaerobic dimethyl sulfoxide reductase chain B | 1,14 | 1,30 | 1,48 |
| SL2492 | <i>dmsA</i> | Anaerobic dimethyl sulfoxide reductase chain A | 1,29 | 1,11 | 1,33 |
| SL2493 | <i>pbpC</i> | Penicillin-binding protein 1C | -1,09 | 1,10 | 1,13 |
| SL2494 | <i>yfhM</i> | Uncharacterized lipoprotein yfhM | 1,14 | 1,00 | 1,77 |
| SL2495 | <i>sseA</i> | 3-mercaptopyruvate sulfurtransferase | 1,08 | 1,25 | 2,90 |
| SL2496 | - | Hypothetical | -1,04 | -1,03 | 1,87 |
| SL2497 | <i>sseB</i> | Protein sseB | 1,00 | -1,32 | -1,12 |
| SL2498 | <i>pepB</i> | Peptidase B | 1,08 | -1,14 | 1,28 |
| SL2499 | <i>iscX</i> | Protein iscX | -1,02 | -1,11 | -1,11 |
| SL2500 | <i>fdx</i> | 2Fe-2S ferredoxin | 1,12 | -1,04 | -1,13 |
| SL2501 | <i>hscA</i> | Chaperone protein hscA | 1,15 | 1,18 | -1,76 |
| SL2502 | <i>hscB</i> | Co-chaperone protein hscB | 1,01 | 1,05 | -2,38 |
| SL2503 | <i>iscA</i> | Iron-binding protein iscA | 1,00 | 1,12 | -1,55 |
| SL2504 | <i>nifU</i> | NifU-like protein | -1,07 | 1,07 | -1,53 |
| SL2505 | <i>iscS</i> | Cysteine desulfurase | -1,17 | 1,13 | -1,99 |
| SL2506 | <i>iscR</i> | HTH-type transcriptional regulator iscR | -1,38 | 1,03 | -3,23 |
| SL2507 | <i>trmJ</i> | tRNA (cytidine/uridine-2'-O-)methyltransferase trr | 1,39 | 1,02 | -2,12 |
| SL2508 | <i>suhB</i> | Inositol-1-monophosphatase | -1,05 | 1,18 | -1,86 |
| SL2509 | <i>yfhR</i> | Uncharacterized protein yfhR | 1,05 | 1,19 | -1,37 |
| SL2510 | <i>asrA</i> | Anaerobic sulfite reductase subunit A | 1,36 | 1,67 | -3,47 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL2511 | <i>asrB</i> | Anaerobic sulfite reductase subunit B | 1,26 | 1,34 | -3,42 |
| SL2512 | <i>asrC</i> | Anaerobic sulfite reductase subunit C | 1,33 | 1,46 | -2,90 |
| SL2513 | - | Putative nickel/cobalt efflux system HI_1248 | 1,07 | -1,02 | -1,36 |
| SL2514 | - | Uncharacterized protein HI_1249 | 1,01 | -1,02 | -1,22 |
| SL2515 | <i>csiE</i> | Stationary phase-inducible protein csiE | 1,24 | 1,36 | 6,85 |
| SL2516 | <i>hcaT</i> | Probable 3-phenylpropionic acid transporter | 1,01 | 1,14 | -1,46 |
| SL2517 | <i>glyA1</i> | Serine hydroxymethyltransferase 1 | 1,10 | -1,19 | 1,72 |
| SL2518 | <i>hmp</i> | Flavohemoprotein | -1,07 | 1,11 | 5,21 |
| SL2519 | <i>cadC</i> | Transcriptional activator cadC | 1,07 | -1,02 | -2,31 |
| SL2520 | <i>cadB</i> | Probable cadaverine/lysine antiporter | -1,10 | -1,36 | -1,44 |
| SL2521 | <i>cadA</i> | Lysine decarboxylase, inducible | 1,46 | -1,13 | -4,98 |
| SL2522 | <i>yjdL</i> | Probable dipeptide and tripeptide permease YjdL | 1,00 | 1,05 | -6,76 |
| SL2523 | <i>glnB</i> | Nitrogen regulatory protein P-II 1 | 1,14 | -1,08 | -1,03 |
| SL2524 | <i>yfhA</i> | Uncharacterized protein yfhA | 1,00 | -1,15 | -1,19 |
| SL2525 | <i>yfhG</i> | Uncharacterized protein yfhG | 1,00 | -1,04 | -1,30 |
| SL2526 | <i>yfhK</i> | Putative sensor-like histidine kinase yfhK | 1,10 | 1,02 | -1,39 |
| SL2527 | <i>purL</i> | Phosphoribosylformylglycinamide synthase | 1,27 | 1,43 | 2,08 |
| SL2528 | - | Periplasmic Protein | -1,24 | 1,06 | -1,15 |
| SL2529 | <i>mltF</i> | Membrane-bound lytic murein transglycosylase F | 1,08 | 1,17 | -1,33 |
| SL2530 | <i>tadA</i> | tRNA-specific adenosine deaminase | 1,24 | 1,16 | -1,08 |
| SL2531 | <i>yfhB</i> | Uncharacterized protein yfhB | 1,20 | 1,15 | 1,55 |
| SL2532 | <i>ybbF</i> | Putative PTS system EIIBC component ybbF | 1,22 | 1,04 | 3,24 |
| SL2533 | <i>murQ</i> | N-acetylmuramic acid 6-phosphate etherase | 1,17 | 1,02 | 3,66 |
| SL2534 | <i>yfhH</i> | Uncharacterized HTH-type transcriptional regulator yfhH | 1,05 | 1,24 | 1,49 |
| SL2535 | <i>panE</i> | Putative 2-dehydropantoate 2-reductase | -1,09 | 1,19 | 1,16 |
| SL2536 | <i>yhjX</i> | Inner membrane protein yhjX | 1,39 | 1,15 | -1,02 |
| SL2537 | <i>cynR</i> | HTH-type transcriptional regulator cynR | -1,02 | 1,05 | 3,05 |
| SL2538 | <i>yfhL</i> | Uncharacterized ferredoxin-like protein yfhL | -1,32 | 1,11 | -2,31 |
| SL2539 | <i>acpS</i> | Holo-[acyl-carrier-protein] synthase | 1,26 | 1,14 | 1,68 |
| SL2540 | <i>pdxJ</i> | Pyridoxine 5'-phosphate synthase | 1,18 | 1,08 | 1,68 |
| SL2541 | <i>recO</i> | DNA repair protein recO | 1,01 | -1,16 | -1,97 |
| SL2542 | <i>era</i> | GTP-binding protein era homolog | -1,00 | -1,09 | -2,18 |
| SL2543 | <i>rnc</i> | Ribonuclease 3 | -1,05 | 1,00 | -2,47 |
| SL2544 | <i>lepB</i> | Signal peptidase I | 1,00 | -1,08 | -1,23 |
| SL2545 | <i>lepA</i> | GTP-binding protein lepA | -1,01 | -1,07 | -1,93 |
| SL2546 | - | Hypothetical | -1,55 | -1,09 | -2,58 |
| SL2547 | - | Gifsy-1 Prophage Protein | -1,66 | 1,41 | -1,59 |
| SL2548 | - | Hypothetical Protein SL2548 | -1,50 | -1,10 | -3,48 |
| SL2549 | - | PagK-Like Protein | -2,08 | 1,46 | -4,10 |
| SL2550 | <i>ycdD</i> | Tail fiber assembly protein homolog from lambdoid prophage Fels-1 | -2,76 | -1,35 | -4,98 |
| SL2551 | - | Appr-1-P Processing Domain-Containing Protein | -2,46 | -1,34 | -4,76 |
| SL2552 | <i>stfQ</i> | Side tail fiber protein homolog from lambdoid prophage Qin | -1,74 | -1,12 | -3,35 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL2553 | - | Hocicity Protein J | -2,46 | -1,12 | -11,08 |
| SL2554 | - | Phage Tail Assembly Protein | -1,31 | -1,13 | -2,08 |
| SL2555 | - | NLP/P60 Protein | -1,80 | -1,35 | -3,95 |
| SL2556 | - | Phage Minor Tail Protein L | -1,54 | -1,16 | -2,63 |
| SL2557 | - | Minor Tail Protein | -1,77 | -1,25 | -2,28 |
| SL2558 | - | Hypothetical | -1,46 | -1,20 | -2,18 |
| SL2559 | - | Minor Tail Protein | -1,81 | -1,02 | -4,83 |
| SL2560 | - | Minor Tail Component Of Putative Prophage | -2,14 | -1,10 | -5,25 |
| SL2561 | - | Tail Protein V | -1,60 | 1,04 | -2,80 |
| SL2562 | - | Minor Tail Protein U | -1,71 | -1,09 | -2,81 |
| SL2563 | <i>ydcM</i> | Putative transposase in snaA-snaB intergenic region | -1,48 | 1,01 | -2,39 |
| SL2564 | - | Phage Tail Component | -1,67 | -1,02 | -3,00 |
| SL2565 | - | Tail Attachment Protein | -2,08 | -1,12 | -2,67 |
| SL2566 | - | DNA Packaging-Like Protein | -1,95 | -1,02 | -3,76 |
| SL2567 | - | P21 prophage-derived major head protein | -1,99 | -1,10 | -4,91 |
| SL2568 | - | Head Decoration Protein | -1,94 | -1,06 | -4,48 |
| SL2569 | <i>sppA</i> | Putative signal peptide peptidase sppA | -2,37 | -1,11 | -10,71 |
| SL2570 | - | Lambda Family Phage Portal Protein | -2,15 | -1,13 | -6,06 |
| SL2571 | - | Lambda prophage-derived head-to-tail joining protein W | -2,13 | -1,13 | -2,93 |
| SL2572 | <i>tfaD</i> | Putative tail fiber assembly protein homolog from lambdoid prophage DLP12 | -2,40 | -1,07 | -4,71 |
| SL2573 | <i>nohA</i> | P21 prophage-derived terminase small subunit | -2,45 | -1,05 | -8,60 |
| SL2574 | <i>ycgK</i> | Uncharacterized protein ycgK | -1,07 | 1,23 | 1,70 |
| SL2575 | <i>rzpD</i> | Putative Rz endopeptidase from lambdoid prophage DLP12 | -2,15 | -1,02 | -5,68 |
| SL2576 | <i>arrD</i> | Probable lysozyme from lambdoid prophage DLP12 | -1,78 | -1,03 | -3,56 |
| SL2577 | - | Hypothetical | -1,85 | -1,13 | -2,26 |
| SL2578 | - | Hypothetical | 1,66 | 1,60 | 2,10 |
| SL2579 | - | Phage Antitermination Protein Q | -1,28 | 1,02 | -1,85 |
| SL2580 | <i>ylcG</i> | Hypothetical | -1,25 | -1,06 | -1,88 |
| SL2581 | - | Hypothetical | -1,49 | 1,00 | -1,50 |
| SL2582 | - | Hypothetical | 1,21 | 1,00 | -1,38 |
| SL2583 | - | Hypothetical | 1,01 | 1,10 | 2,16 |
| SL2585 | - | Hypothetical Protein SL2585 | -1,24 | -1,09 | -1,29 |
| SL2586 | - | Hypothetical | -1,29 | -1,18 | -1,44 |
| SL2587 | - | Hypothetical | -1,37 | -1,15 | -1,11 |
| SL2588 | - | Methyltransferase | -1,46 | -1,40 | -1,13 |
| SL2589 | - | Hypothetical | -1,41 | -1,37 | -1,10 |
| SL2590 | - | Hypothetical | -1,40 | -1,20 | -1,41 |
| SL2591 | <i>yfdO</i> | Uncharacterized protein yfdO | -1,65 | -1,21 | -1,87 |
| SL2592 | - | Gifsy-1 Prophage CI Protein | -1,28 | 1,28 | -2,12 |
| SL2593 | - | Hypothetical | 1,06 | -1,17 | -1,45 |
| SL2594 | - | ATPase Domain-Containing Protein | -1,18 | -1,08 | -1,26 |
| SL2595 | - | Hypothetical | -1,09 | 1,33 | -1,90 |
| SL2596 | - | Hypothetical | -1,72 | -1,01 | -2,41 |
| SL2597 | <i>recE</i> | Exodeoxyribonuclease 8 | -1,33 | 1,01 | -2,59 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL2598 | - | Hypothetical | -1,10 | 1,08 | 1,03 |
| SL2599 | - | Excisionase-Like Protein | -1,10 | 1,07 | -1,22 |
| SL2600 | <i>intB</i> | Putative prophage P4 integrase | 1,38 | -1,17 | 1,90 |
| SL2601 | <i>rseC</i> | Sigma-E factor regulatory protein rseC | -1,20 | -1,22 | -1,48 |
| SL2602 | <i>rseB</i> | Sigma-E factor regulatory protein rseB | -1,23 | -1,41 | -2,07 |
| SL2603 | <i>rseA</i> | Sigma-E factor negative regulatory protein | -1,13 | -1,10 | -1,64 |
| SL2604 | <i>rpoE</i> | RNA polymerase sigma-E factor | -1,10 | -1,09 | -2,10 |
| SL2605 | <i>nadB</i> | L-aspartate oxidase | 1,16 | -1,03 | -1,25 |
| SL2606 | <i>yfiC</i> | tRNA (adenine-N(6)-)methyltransferase | 1,02 | -1,03 | -1,28 |
| SL2607 | <i>srmB</i> | ATP-dependent RNA helicase srmB | 1,17 | 1,17 | 1,31 |
| SL2608 | <i>yfiE</i> | Uncharacterized HTH-type transcriptional regulator yfiE | 1,09 | 1,00 | -1,59 |
| SL2609 | <i>eamB</i> | Cysteine/O-acetylserine efflux protein | 1,53 | 1,05 | -7,15 |
| SL2610 | <i>grcA</i> | Autonomous glycyl radical cofactor | 1,06 | 1,11 | -2,16 |
| SL2611 | <i>ung</i> | Uracil-DNA glycosylase | 1,02 | -1,17 | -1,32 |
| SL2612 | <i>yfiF</i> | Uncharacterized tRNA/rRNA methyltransferase yfiF | 1,19 | 1,12 | -1,33 |
| SL2613 | <i>trxC</i> | Thioredoxin-2 | -1,10 | 1,03 | -2,37 |
| SL2614 | <i>yfiP</i> | DTW domain-containing protein yfiP | 1,07 | 1,06 | -1,87 |
| SL2615 | <i>yfiQ</i> | Uncharacterized protein yfiQ | 1,10 | 1,07 | 1,60 |
| SL2616 | <i>pssA</i> | CDP-diacylglycerol--serine O-phosphatidyltransferase | -1,08 | -1,17 | -1,34 |
| SL2617 | <i>yfiM</i> | Uncharacterized protein yfiM | 1,04 | -1,02 | -1,15 |
| SL2618 | <i>kgtP</i> | Alpha-ketoglutarate permease | 1,23 | 1,05 | 2,63 |
| SL2619 | - | Hypothetical | -1,21 | -1,07 | 1,51 |
| SL2620 | <i>clpB</i> | Chaperone protein clpB | 1,03 | 1,15 | 2,60 |
| SL2621 | <i>yfiH</i> | UPF0124 protein yfiH | 1,06 | 1,28 | -1,05 |
| SL2622 | <i>rluD</i> | Ribosomal large subunit pseudouridine synthase D | -1,02 | -1,09 | -2,26 |
| SL2623 | <i>yfiO</i> | UPF0169 lipoprotein yfiO | -1,30 | -1,33 | -2,41 |
| SL2624 | <i>raiA</i> | Ribosome-associated inhibitor A | 1,15 | 1,42 | 2,90 |
| SL2625 | <i>pheA</i> | P-protein | 1,11 | -1,21 | 2,88 |
| SL2626 | <i>yvrE</i> | Uncharacterized protein yvrE | -1,07 | -1,20 | 1,03 |
| SL2627 | <i>tyrA</i> | T-protein | 1,04 | -1,10 | -1,01 |
| SL2628 | <i>aroF</i> | Phospho-2-dehydro-3-deoxyheptonate aldolase, Tyr-sensitive | -1,06 | 1,13 | -1,14 |
| SL2629 | <i>yfiR</i> | Uncharacterized protein yfiR | 1,09 | 1,07 | -1,77 |
| SL2630 | <i>yfiN</i> | Probable diguanylate cyclase YfiN | -1,01 | 1,18 | -2,63 |
| SL2631 | <i>xerD</i> | Integrase | -1,25 | -1,33 | 1,42 |
| SL2632 | <i>yebY</i> | Hypothetical Protein yebY | -1,17 | -1,23 | 1,54 |
| SL2633 | - | Putative uncharacterized protein ORFI in retrón EC67 | -1,23 | -1,42 | 1,34 |
| SL2634 | - | Hypothetical | -1,23 | -1,02 | -1,05 |
| SL2635 | - | Putative uncharacterized protein ORFB in retrón EC67 | -1,04 | 1,39 | 1,34 |
| SL2636 | - | Hypothetical | -1,13 | -1,22 | -1,01 |
| SL2637 | - | Putative uncharacterized protein ORFC-like in prophage region | 1,30 | 1,03 | 1,65 |
| SL2638 | - | Hypothetical | 1,69 | -1,36 | 1,46 |
| SL2639 | <i>traR</i> | Hypothetical | 1,30 | -1,28 | 1,23 |
| SL2640 | - | Hypothetical Protein SL2640 | 1,13 | 1,04 | 2,32 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-------------------|-------------------|-----------------------|
| SL2641 | - | Probable replication endonuclease from prophage-like region 1 | 1,11 | -1,02 | 1,25 |
| SL2642 | - | P2 GpU Family Protein | 1,12 | 1,01 | 1,36 |
| SL2643 | b2083 | Late Control D Family Protein | 1,00 | 1,21 | 1,42 |
| SL2644 | - | Hypothetical Protein SL2644 | -1,01 | -1,02 | 1,42 |
| SL2645 | ogrK | Prophage P2 OGR protein | -1,06 | -1,04 | -1,04 |
| SL2646 | rpIS | 50S ribosomal protein L19 | -1,07 | -1,16 | 1,03 |
| SL2647 | trmD | tRNA (guanine-N(1)-)methyltransferase | -1,02 | -1,02 | -1,06 |
| SL2648 | rimM | Ribosome maturation factor rimM | -1,12 | -1,12 | -1,13 |
| SL2649 | rpsP | 30S ribosomal protein S16 | -1,09 | -1,12 | -1,58 |
| SL2650 | ffh | Signal recognition particle protein | 1,17 | 1,02 | -1,78 |
| SL2651 | ypjD | Inner membrane protein ypjD | -1,17 | 1,04 | -2,45 |
| SL2652 | yfjD | UPF0053 inner membrane protein yfjD | -1,25 | -1,36 | -2,50 |
| SL2653 | - | Hypothetical | 1,10 | 1,06 | -1,30 |
| SL2654 | grpE | Protein grpE | -1,10 | -1,23 | 1,66 |
| SL2655 | ppnK | Probable inorganic polyphosphate/ATP-NAD kinase | 1,05 | -1,08 | 1,03 |
| SL2656 | recN | DNA repair protein recN | 1,01 | 1,17 | 1,58 |
| SL2657 | smpA | Small protein A | -1,12 | -1,01 | -1,24 |
| SL2658 | rnfH | Protein rnfH | -1,03 | -1,05 | 1,02 |
| SL2659 | yfjG | UPF0083 protein yfjG | 1,01 | 1,01 | -1,10 |
| SL2660 | smpB | SsrA-binding protein | 1,03 | -1,10 | -1,04 |
| SL2661 | - | Hypothetical | 1,09 | 1,29 | 1,11 |
| SL2662 | bepC | Outer membrane efflux protein BepC | 1,15 | 1,22 | 1,07 |
| SL2663 | apxIB | Toxin RTX-I translocation ATP-binding protein | 1,06 | -1,10 | -1,12 |
| SL2664 | cyaD | Protein cyaD | -1,03 | -1,10 | 1,21 |
| SL2665 | ogrK | Prophage P2 OGR protein | 1,40 | 1,13 | -1,21 |
| SL2666 | b2083 | Late Control D Family Protein | 1,20 | -1,03 | 1,28 |
| SL2667 | - | P2 GpU Family Protein | 1,20 | -1,18 | 1,51 |
| SL2668 | - | Hypothetical | -1,04 | -1,38 | 1,28 |
| SL2669 | - | Hypothetical | -1,14 | -1,17 | 1,39 |
| SL2670 | - | Phage Tail Protein | -1,20 | -1,34 | 1,88 |
| SL2671 | - | Phage Tail Tube Protein | -1,05 | -1,24 | 1,33 |
| SL2672 | - | Phage Tail Sheath Protein | -1,39 | -1,04 | -1,13 |
| SL2673 | pinE | DNA-invertase from lambdoid prophage e14 | -1,32 | 1,11 | -3,80 |
| SL2674 | sopE | Guanine nucleotide exchange factor sopE | -1,33 | -1,03 | -27,69 |
| SL2675 | ycdD | Tail fiber assembly protein homolog from lambdoid prophage Fels-1 | -1,12 | 1,28 | 1,64 |
| SL2676 | - | Hypothetical | 1,16 | 1,09 | 1,99 |
| SL2677 | - | Phage Tail Protein I | -1,40 | -1,44 | 1,33 |
| SL2678 | - | Baseplate J Family Protein | -1,01 | -1,03 | 1,50 |
| SL2679 | - | GPW/Gp25 Family Protein | 1,15 | -1,26 | 1,80 |
| SL2680 | - | Phage Baseplate Assembly Protein V | -1,25 | -1,24 | 1,48 |
| SL2681 | - | Phage Virion Morphogenesis Protein | 1,15 | 1,16 | 1,02 |
| SL2682 | - | P2 Phage Tail Completion R Family Protein | 1,21 | -1,31 | 1,92 |
| SL2683 | - | Fels-2 Prophage Protein | 1,12 | 1,04 | 1,96 |
| SL2684 | - | Hypothetical | 1,15 | 1,21 | 1,47 |
| SL2685 | - | Hypothetical | 1,34 | 1,28 | 1,69 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-------------------|-------------------|-----------------------|
| SL2686 | <i>arrD</i> | Probable lysozyme from lambdoid prophage DLP12 | -1,11 | -1,03 | 1,75 |
| SL2687 | - | Secretion Protein | -1,19 | -1,21 | 1,09 |
| SL2688 | - | Tail X Family Protein | -1,12 | -1,26 | -1,05 |
| SL2689 | - | Head Completion Protein | 1,01 | -1,10 | 1,08 |
| SL2690 | - | Phage Small Terminase Subunit | -1,06 | -1,42 | 1,35 |
| SL2691 | - | P2 Family Phage Capsid Protein | -1,15 | 1,15 | 1,62 |
| SL2692 | - | Phage Capsid Scaffolding Protein | -1,21 | 1,06 | 1,63 |
| SL2693 | - | Hypothetical | -1,24 | -1,18 | 1,19 |
| SL2694 | - | Putative uncharacterized protein ORF5 in retron EC67 | -1,11 | -1,34 | -1,11 |
| SL2695 | <i>smf</i> | Protein smf | -1,04 | -1,23 | 2,11 |
| SL2696 | - | Hypothetical | -1,12 | -1,39 | 3,87 |
| SL2697 | - | Hypothetical | -1,30 | -1,61 | -2,19 |
| SL2698 | - | Hypothetical | -1,37 | -1,48 | -1,52 |
| SL2699 | <i>dnl</i> | Dnl-like protein in retron EC67 | -1,23 | -1,04 | 1,76 |
| SL2700 | - | Hypothetical | 1,04 | 1,39 | 1,93 |
| SL2701 | - | Probable replication endonuclease from prophage-like region | -1,01 | -1,19 | 1,23 |
| SL2702 | <i>dam</i> | Retron EC67 DNA adenine methylase | -1,58 | -1,11 | -1,61 |
| SL2703 | <i>ybil</i> | Hypothetical | -2,29 | -1,54 | -1,69 |
| SL2704 | - | Putative uncharacterized protein ORFC-like in prophage region | -3,07 | -1,35 | -3,46 |
| SL2705 | - | Hypothetical | -1,95 | -1,09 | -1,79 |
| SL2706 | - | Putative uncharacterized protein ORFB in retron EC67 | -1,15 | -1,01 | -1,87 |
| SL2707 | - | Phage Regulatory Protein | -1,22 | -1,17 | 1,14 |
| SL2708 | - | Putative uncharacterized protein ORFI in retron EC67 | -1,16 | -1,34 | 1,57 |
| SL2709 | <i>xerD</i> | Tyrosine recombinase xerD | -1,14 | -1,37 | 2,01 |
| SL2710 | <i>yopC</i> | SPBc2 prophage-derived uncharacterized protein yopC | -1,34 | -1,52 | 3,11 |
| SL2711 | - | Hypothetical Protein SL2711 | 1,04 | 1,01 | 1,07 |
| SL2712 | <i>intA</i> | Prophage CP4-57 integrase | -1,10 | -1,19 | 2,48 |
| SL2713 | - | Hypothetical | -1,41 | -2,00 | 1,55 |
| SL2714 | - | Hypothetical Protein SL2714 | -1,15 | -1,28 | 1,66 |
| SL2715 | - | Hypothetical Protein SL2715 | 1,01 | -1,13 | 2,19 |
| SL2716 | - | Phage Polarity Suppression Protein | -1,15 | -1,03 | 1,47 |
| SL2717 | <i>ogrK</i> | Prophage P2 OGR protein | -1,16 | 1,01 | 1,29 |
| SL2718 | - | Hypothetical | 1,39 | -1,04 | 1,93 |
| SL2719 | - | Hypothetical | 1,01 | -1,31 | 3,69 |
| SL2720 | - | Hypothetical | 1,12 | -1,38 | 3,04 |
| SL2721 | - | P4 prophage-derived uncharacterized protein t2655 | 1,33 | -1,17 | 2,87 |
| SL2722 | <i>traC</i> | DNA primase traC | 1,07 | -1,27 | 4,29 |
| SL2723 | <i>intA</i> | Prophage CP4-57 integrase | 1,26 | 1,78 | 6,56 |
| SL2724 | <i>intA</i> | Integrase | 1,18 | 1,34 | 3,40 |
| SL2725 | - | Hypothetical Protein SL2725 | -1,05 | -1,06 | 1,65 |
| SL2726 | - | Hypothetical | -1,35 | -1,30 | -2,11 |
| SL2727 | - | Hypothetical | -1,12 | -1,08 | 1,54 |
| SL2728 | - | Cytoplasmic Protein | 1,30 | 1,54 | 1,38 |
| SL2729 | - | Hypothetical | -1,20 | -1,31 | 1,40 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-----------------------|-----------------------|---------------------------|
| SL2730 | - | ATPase | -1,12 | -1,32 | -1,06 |
| SL2731 | - | Hypothetical | -1,17 | -1,77 | -1,37 |
| SL2732 | - | Transcriptional Regulator XRE Family | -1,13 | 1,15 | 1,05 |
| SL2733 | <i>sfsB</i> | Sugar fermentation stimulation protein B | -1,18 | -1,03 | -1,30 |
| SL2734 | <i>srlA</i> | Glucitol/sorbitol permease IIC component | -1,20 | 1,26 | -1,03 |
| SL2735 | <i>srlB</i> | Glucitol/sorbitol-specific phosphotransferase enzyme IIA component | -1,20 | 1,36 | 1,28 |
| SL2736 | <i>srlE</i> | Glucitol/sorbitol-specific phosphotransferase enzyme IIB component | -1,21 | 1,05 | -1,38 |
| SL2737 | <i>yrbE</i> | Uncharacterized oxidoreductase yrbE | -1,04 | 1,11 | -1,22 |
| SL2738 | - | Hypothetical | 1,02 | -1,52 | -1,08 |
| SL2739 | <i>hxIA</i> | 3-hexulose-6-phosphate synthase | 1,52 | 2,29 | 1,14 |
| SL2740 | <i>hxIB</i> | 3-hexulose-6-phosphate isomerase | 1,22 | -1,18 | 2,93 |
| SL2741 | - | Glucose-6-Phosphate Isomerase | 1,26 | 1,00 | 2,42 |
| SL2742 | <i>ptsG</i> | PTS system glucose-specific EIICBA component | -1,15 | 1,29 | 1,46 |
| SL2743 | <i>sgrR</i> | HTH-type transcriptional regulator sgrR | 1,10 | 1,41 | 3,19 |
| SL2744 | - | Hypothetical | 1,10 | -1,12 | 1,13 |
| SL2745 | - | Hypothetical | 1,08 | 1,11 | 1,30 |
| SL2746 | - | Hypothetical | 1,16 | 1,38 | 1,44 |
| SL2747 | <i>intA</i> | Prophage CP4-57 integrase | -1,07 | 1,00 | 2,76 |
| SL2748 | - | Hypothetical Protein SL2748 | 1,00 | 1,12 | 1,42 |
| SL2749 | - | Hypothetical Protein SL2749 | 1,03 | 1,23 | 1,10 |
| SL2750 | <i>lcrS</i> | Low calcium response locus protein S | -1,00 | 1,09 | 1,46 |
| SL2751 | - | Hypothetical | -1,28 | -1,51 | 1,36 |
| SL2752 | - | Hypothetical | -1,22 | -1,83 | 1,68 |
| SL2753 | <i>insE1</i> | Transposase insE for insertion sequence IS3A | -1,34 | -1,04 | 1,46 |
| SL2754 | <i>insF1</i> | Transposase insF for insertion sequence IS3A | -1,11 | -1,24 | -1,12 |
| SL2755 | <i>fliA</i> | Repressor of phase 1 flagellin gene | -12,65 | -4,66 | -15,85 |
| SL2756 | <i>fliB</i> | Phase 2 flagellin | -2,40 | -1,63 | -1,84 |
| SL2757 | NA | NA | -1,36 | -1,03 | -1,06 |
| SL2758 | - | Hypothetical | -1,39 | 1,54 | -5,31 |
| SL2759 | <i>ygaD</i> | Putative multidrug export ATP-binding/permease protein ygaD | 1,36 | 1,74 | -2,78 |
| SL2760 | <i>fes</i> | Enterochelin esterase | 1,04 | -1,11 | -2,90 |
| SL2761 | <i>besA</i> | Ferri-bacillibactin esterase BesA | 1,04 | -1,33 | -1,58 |
| SL2762 | <i>pfeA</i> | Ferric enterobactin receptor | 1,09 | 1,02 | -1,57 |
| SL2763 | <i>pipB2</i> | Secreted effector protein pipB2 | -1,78 | 1,18 | -1,57 |
| SL2764 | <i>ybjX</i> | Uncharacterized protein ybjX | -1,45 | 1,10 | -4,33 |
| SL2765 | - | Hypothetical | -1,67 | -1,35 | -3,63 |
| SL2766 | - | Hypothetical | -1,47 | 1,04 | -2,82 |
| SL2767 | <i>hoxN</i> | High-affinity nickel transport protein | 1,02 | 1,31 | -1,93 |
| SL2768 | <i>qseC</i> | Sensor protein qseC | -1,13 | -1,40 | 7,27 |
| SL2769 | <i>tctD</i> | Transcriptional regulatory protein tctD | 1,03 | 1,08 | 13,84 |
| SL2770 | <i>yfIP</i> | UPF0065 protein yfIP | -1,24 | -1,43 | 3,01 |
| SL2771 | - | Hypothetical | -1,06 | -1,07 | 4,00 |
| SL2772 | - | Uncharacterized 52.8 kDa protein in TAR-I ttuC' 3'region | -1,08 | -1,11 | 1,94 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL2773 | <i>csiD</i> | Protein csiD | -1,27 | -1,17 | 11,87 |
| SL2774 | <i>ygaF</i> | Uncharacterized protein ygaF | -1,30 | -1,54 | 9,95 |
| SL2775 | <i>gabD</i> | Succinate-semialdehyde dehydrogenase [NADP+] | -1,31 | -1,53 | 12,61 |
| SL2776 | <i>gabT</i> | 4-aminobutyrate aminotransferase | -1,37 | -1,66 | 7,78 |
| SL2777 | <i>gabP</i> | GABA permease | -1,46 | -1,56 | 6,21 |
| SL2778 | <i>ygaE</i> | Uncharacterized HTH-type transcriptional regulator ygaE | -1,10 | -1,43 | 1,31 |
| SL2779 | <i>ygaU</i> | Uncharacterized protein ygaU | 1,15 | 1,30 | -1,15 |
| SL2780 | <i>yqaE</i> | UPF0057 membrane protein yqaE | 1,08 | 1,20 | 1,76 |
| SL2781 | <i>ygaV</i> | Probable HTH-type transcriptional regulator ygaV | 1,07 | -1,13 | -1,45 |
| SL2782 | <i>ygaP</i> | Inner membrane protein ygaP | 1,00 | 1,15 | -1,09 |
| SL2783 | <i>stpA</i> | DNA-binding protein stpA | -1,14 | -1,00 | -10,03 |
| SL2784 | <i>ygaW</i> | Uncharacterized protein ygaW | 1,29 | 1,21 | -3,82 |
| SL2785 | <i>ygaC</i> | Uncharacterized protein ygaC | -1,02 | 1,22 | -2,25 |
| SL2786 | <i>ygaM</i> | Uncharacterized protein ygaM | 1,24 | 1,24 | 1,23 |
| SL2787 | <i>mocR</i> | Probable rhizopine catabolism regulatory protein mocR | 1,16 | 1,01 | 2,22 |
| SL2788 | <i>ydfG</i> | Uncharacterized protein ydfG | -1,03 | -1,05 | 1,63 |
| SL2789 | - | Hypothetical | -1,05 | -1,08 | 1,22 |
| SL2790 | <i>nrdH</i> | Glutaredoxin-like protein nrdH | 1,05 | 1,10 | 1,70 |
| SL2791 | <i>nrdl</i> | Protein nrdl | 1,01 | 1,49 | 1,53 |
| SL2792 | <i>nrdE</i> | Ribonucleoside-diphosphate reductase 2 subunit alpha | 1,18 | 1,02 | 1,34 |
| SL2793 | <i>nrdF</i> | Ribonucleoside-diphosphate reductase 2 subunit beta | 1,20 | 1,11 | -1,08 |
| SL2794 | <i>proV</i> | Glycine betaine/L-proline transport ATP-binding protein proV | -1,29 | -1,26 | -1,46 |
| SL2795 | <i>proW</i> | Glycine betaine/L-proline transport system permease protein proW | -1,40 | -1,38 | 1,20 |
| SL2796 | <i>proX</i> | Glycine betaine-binding periplasmic protein | -1,35 | -1,23 | 1,67 |
| SL2797 | <i>ygaY</i> | Uncharacterized transporter ygaY | 1,08 | -1,03 | -1,64 |
| SL2798 | <i>mprA</i> | Transcriptional repressor mprA | 1,24 | -1,17 | -1,41 |
| SL2799 | <i>emrA</i> | Multidrug resistance protein A | 1,29 | -1,18 | -1,51 |
| SL2800 | <i>emrB</i> | Multidrug resistance protein B | 1,31 | -1,42 | -1,73 |
| SL2801 | - | Glycoporin | 1,06 | -1,06 | 1,97 |
| SL2802 | <i>luxS</i> | S-ribosylhomocysteine lyase | 1,32 | 1,26 | 1,48 |
| SL2803 | <i>gshA</i> | Glutamate--cysteine ligase | 1,06 | -1,17 | -1,18 |
| SL2804 | <i>yqaA</i> | Inner membrane protein yqaA | 1,17 | -1,22 | -1,45 |
| SL2805 | <i>yqaB</i> | Phosphatase yqaB | 1,08 | -1,09 | -1,39 |
| SL2806 | <i>csrA</i> | Carbon storage regulator homolog | 1,06 | -1,05 | 1,64 |
| SL2807 | <i>alaS</i> | Alanyl-tRNA synthetase | 1,02 | -1,30 | 1,48 |
| SL2808 | <i>recX</i> | Regulatory protein recX | 1,21 | 1,00 | -1,07 |
| SL2809 | <i>recA</i> | Protein recA | 1,01 | -1,13 | 1,52 |
| SL2810 | <i>ygaD</i> | Protein ygaD | 1,04 | -1,10 | 1,12 |
| SL2811 | <i>mltB</i> | Membrane-bound lytic murein transglycosylase B | -1,06 | 1,06 | -1,34 |
| SL2812 | <i>srlA</i> | Glucitol/sorbitol permease IIC component | 1,04 | -1,17 | -1,24 |
| SL2813 | <i>srlE</i> | Glucitol/sorbitol-specific phosphotransferase enzyme IIB component | 1,16 | -1,09 | -1,59 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-------------------|-------------------|-----------------------|
| SL2814 | <i>srlB</i> | Glucitol/sorbitol-specific phosphotransferase enzyme IIA component | 1,10 | -1,54 | -2,28 |
| SL2815 | <i>srlD</i> | Sorbitol-6-phosphate 2-dehydrogenase | 1,14 | -1,24 | -2,47 |
| SL2816 | <i>gutM</i> | Glucitol operon activator protein | -1,01 | -1,27 | -2,46 |
| SL2817 | <i>srlR</i> | Glucitol operon repressor | 1,03 | -1,08 | -1,09 |
| SL2818 | <i>gutQ</i> | Protein gutQ | 1,05 | 1,00 | 1,43 |
| SL2819 | <i>norR</i> | Anaerobic nitric oxide reductase transcription regulator norR | 1,09 | -1,01 | 1,54 |
| SL2820 | <i>norV</i> | Anaerobic nitric oxide reductase flavorubredoxin | -1,13 | -1,12 | -1,20 |
| SL2821 | <i>norW</i> | Nitric oxide reductase FIRd-NAD(+) reductase | -1,02 | -1,22 | 1,44 |
| SL2822 | <i>hypF</i> | Carbamoyltransferase hypF | 1,07 | -1,10 | -1,24 |
| SL2823 | <i>hydN</i> | Electron transport protein hydN | 1,30 | 1,10 | -7,66 |
| SL2824 | - | Conserved Hypothetical Protein | 1,03 | -1,10 | 1,96 |
| SL2825 | <i>hycI</i> | Hydrogenase 3 maturation protease | 1,09 | 1,09 | 2,56 |
| SL2826 | <i>hycH</i> | Formate hydrogenlyase maturation protein hycH | 1,04 | 1,06 | 2,01 |
| SL2827 | <i>hycG</i> | Formate hydrogenlyase subunit 7 | -1,01 | -1,12 | 1,94 |
| SL2828 | <i>hycF</i> | Formate hydrogenlyase subunit 6 | 1,02 | -1,87 | 1,32 |
| SL2829 | <i>hycE</i> | Formate hydrogenlyase subunit 5 | 1,21 | -1,35 | -1,05 |
| SL2830 | <i>hycD</i> | Formate hydrogenlyase subunit 4 | 1,03 | -1,07 | -1,88 |
| SL2831 | <i>hycC</i> | Formate hydrogenlyase subunit 3 | 1,05 | -1,28 | -3,72 |
| SL2832 | <i>hycB</i> | Formate hydrogenlyase subunit 2 | -1,10 | 1,04 | -4,92 |
| SL2833 | <i>hycA</i> | Formate hydrogenlyase regulatory protein hycA | 1,02 | -1,01 | -7,96 |
| SL2834 | <i>hypA</i> | Protein hypA | 1,20 | 1,19 | -1,62 |
| SL2835 | <i>hypB</i> | Hydrogenase isoenzymes nickel incorporation protein hypB | 1,30 | 1,11 | -1,01 |
| SL2836 | <i>hypC</i> | Hydrogenase isoenzymes formation protein hypC | 1,26 | 1,15 | -1,09 |
| SL2837 | <i>hypD</i> | Hydrogenase isoenzymes formation protein hypD | 1,16 | -1,05 | -1,60 |
| SL2838 | <i>hypE</i> | Hydrogenase isoenzymes formation protein hypE | 1,17 | -1,26 | -2,56 |
| SL2839 | <i>fhlA</i> | Formate hydrogenlyase transcriptional activator | 1,22 | -1,02 | -2,24 |
| SL2840 | <i>ygbA</i> | Uncharacterized protein ygbA | -1,15 | -1,20 | 1,17 |
| SL2841 | <i>znuA</i> | Uncharacterized periplasmic iron-binding protein HI_0362 | -1,06 | 1,64 | -1,87 |
| SL2842 | <i>sitB</i> | Chelated iron transport system membrane protein yfeB | -1,24 | 1,40 | -1,80 |
| SL2843 | <i>sitC</i> | Chelated iron transport system membrane protein yfeC | -1,07 | 1,45 | -1,60 |
| SL2844 | <i>sitD</i> | Probable iron transport system membrane protein HI_0359 | -1,18 | -1,12 | -3,87 |
| SL2845 | <i>yopJ</i> | Effector protein yopJ | -1,36 | -1,29 | -5,48 |
| SL2846 | - | Hypothetical | -1,39 | -1,66 | -14,85 |
| SL2847 | <i>sirC</i> | Transcriptional regulator sirC | -1,41 | -1,61 | -10,80 |
| SL2848 | - | Hypothetical | -1,56 | -1,22 | -20,93 |
| SL2849 | <i>orgB</i> | Oxygen-regulated invasion protein orgB | -1,44 | -1,20 | -9,10 |
| SL2850 | <i>orgA</i> | Oxygen-regulated invasion protein orgA | -1,49 | -1,26 | -21,71 |
| SL2851 | <i>prgK</i> | Lipoprotein prgK | -1,30 | -1,14 | -8,73 |
| SL2852 | <i>prgJ</i> | Protein prgJ | -1,22 | -1,08 | -8,23 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL2853 | <i>prgI</i> | Protein prgI | -1,13 | -1,02 | -4,71 |
| SL2854 | <i>prgH</i> | Protein prgH | -1,36 | 1,09 | -18,46 |
| SL2855 | <i>hilD</i> | Transcriptional regulator hilD | -1,39 | -1,07 | -5,63 |
| SL2856 | <i>hilA</i> | Transcriptional regulator hilA | -1,26 | -1,38 | -10,34 |
| SL2857 | <i>iagB</i> | Invasion protein iagB | -1,27 | -1,07 | -7,09 |
| SL2858 | <i>sptP</i> | Secreted effector protein sptP | -1,24 | -1,03 | -5,53 |
| SL2859 | <i>sicP</i> | Chaperone protein sicP | -1,35 | -1,14 | -8,37 |
| SL2860 | <i>iacP</i> | Probable acyl carrier protein iacP | -1,30 | -1,10 | -21,34 |
| SL2861 | <i>sipA</i> | Cell invasion protein sipA | -1,25 | -1,06 | -15,35 |
| SL2862 | <i>sipD</i> | Cell invasion protein sipD | -1,13 | 1,02 | -18,49 |
| SL2863 | <i>sipC</i> | Cell invasion protein sipC | -1,10 | 1,01 | -6,21 |
| SL2864 | <i>sipB</i> | Cell invasion protein sipB | -1,11 | 1,03 | -7,20 |
| SL2865 | <i>sicA</i> | Chaperone protein sicA | -1,10 | 1,09 | -8,04 |
| SL2866 | <i>spaS</i> | Surface presentation of antigens protein spaS | -1,42 | -1,39 | -21,68 |
| SL2867 | <i>spaR</i> | Surface presentation of antigens protein spaR | -1,55 | -1,58 | -22,12 |
| SL2868 | <i>spaQ</i> | Surface presentation of antigens protein SpaQ | -1,54 | -1,38 | -32,11 |
| SL2869 | <i>spaP</i> | Surface presentation of antigens protein spaP | -1,68 | -1,43 | -29,30 |
| SL2870 | <i>spaO</i> | Surface presentation of antigens protein SpaO | -1,28 | -1,25 | -14,14 |
| SL2871 | <i>spaN</i> | Surface presentation of antigens protein spaN | -1,17 | -1,10 | -9,31 |
| SL2872 | <i>spaM</i> | Surface presentation of antigens protein spaM | -1,29 | -1,40 | -10,63 |
| SL2873 | <i>spaL</i> | Probable ATP synthase spaL | -1,29 | -1,41 | -10,53 |
| SL2874 | <i>spaK</i> | Surface presentation of antigens protein spaK | -1,15 | -1,03 | -6,61 |
| SL2875 | <i>invA</i> | Invasion protein invA | -1,27 | -1,01 | -12,89 |
| SL2876 | <i>invE</i> | Invasion protein invE | -1,30 | -1,14 | -20,75 |
| SL2877 | <i>invG</i> | Protein invG | -1,17 | -1,02 | -8,31 |
| SL2878 | <i>invF</i> | Invasion protein invF | -1,17 | 1,06 | -8,31 |
| SL2879 | <i>invH</i> | Invasion lipoprotein invH | -1,50 | -1,13 | -10,98 |
| SL2880 | - | Hypothetical | -1,50 | 1,10 | -2,45 |
| SL2881 | - | Hypothetical | -1,52 | -1,00 | -3,47 |
| SL2882 | - | Cytoplasmic Protein | 1,09 | 1,39 | -1,04 |
| SL2883 | - | Hypothetical Protein SL2883 | -1,10 | 1,10 | -1,04 |
| SL2884 | - | Hypothetical | 1,38 | 1,30 | 6,08 |
| SL2885 | - | GCN5-Related N-Acetyltransferase | 1,09 | 1,04 | 5,08 |
| SL2886 | <i>pphB</i> | Serine/threonine-protein phosphatase 2 | 1,22 | -1,08 | -1,32 |
| SL2887 | - | Phage Integrase Family Protein | 1,28 | 1,05 | -1,09 |
| SL2888 | <i>mutS</i> | DNA mismatch repair protein mutS | 1,14 | -1,09 | 1,95 |
| SL2889 | - | Hypothetical | 1,24 | -1,08 | 1,32 |
| SL2890 | <i>yhcA</i> | Uncharacterized MFS-type transporter yhcA | 1,02 | -1,38 | 1,39 |
| SL2891 | <i>ptxR</i> | HTH-type transcriptional regulator ptxR | 1,24 | 1,21 | 1,34 |
| SL2892 | <i>ygbN</i> | Uncharacterized permease HI_1015 | 1,20 | -1,09 | 3,82 |
| SL2893 | <i>rfG</i> | Uncharacterized protein HI_1014 | 1,10 | 1,17 | 4,43 |
| SL2894 | <i>ygbM</i> | Protein ygbM | -1,09 | -1,22 | 4,27 |
| SL2895 | <i>ygbL</i> | Putative aldolase class 2 protein ygbL | 1,05 | 1,07 | 5,99 |
| SL2896 | <i>ygbK</i> | Uncharacterized protein ygbK | -1,09 | 1,24 | 7,13 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL2897 | <i>ygbJ</i> | Uncharacterized oxidoreductase <i>ygbJ</i> | -1,09 | 1,34 | 6,18 |
| SL2898 | <i>ygbI</i> | Uncharacterized HTH-type transcriptional regulator <i>ygbI</i> | -1,00 | -1,17 | 1,08 |
| SL2899 | <i>hosA</i> | Transcriptional regulator <i>hosA</i> | -1,10 | 1,09 | 2,00 |
| SL2900 | <i>pad1</i> | Probable aromatic acid decarboxylase | 1,01 | 1,13 | -1,35 |
| SL2901 | <i>vdcC</i> | Protein <i>vdcC</i> | -1,01 | -1,00 | 1,52 |
| SL2902 | <i>bsdD</i> | Phenolic acid decarboxylase subunit D | 1,70 | 1,16 | 1,11 |
| SL2903 | <i>rpoS</i> | RNA polymerase sigma factor <i>rpoS</i> | 1,17 | 1,12 | 2,05 |
| SL2904 | <i>nlpD</i> | Lipoprotein <i>nlpD</i> | 1,13 | 1,13 | 1,07 |
| SL2905 | <i>pcm</i> | Protein-L-isoaspartate O-methyltransferase | 1,25 | -1,14 | -1,25 |
| SL2906 | <i>surE</i> | Multifunctional protein <i>surE</i> | 1,29 | -1,19 | 1,17 |
| SL2907 | <i>truD</i> | tRNA pseudouridine synthase D | 1,18 | -1,14 | 1,17 |
| SL2908 | <i>ispF</i> | 2-C-methyl-D-erythritol 2,4-cyclodiphosphate synthase | 1,20 | -1,09 | 1,39 |
| SL2909 | <i>ispD</i> | 2-C-methyl-D-erythritol 4-phosphate cytidylyltransferase | 1,09 | -1,21 | -1,34 |
| SL2910 | <i>ftsB</i> | Cell division protein <i>ftsB</i> homolog | 1,01 | -1,03 | -1,79 |
| SL2911 | <i>ygbE</i> | Inner membrane protein <i>ygbE</i> | -1,18 | 1,12 | 2,47 |
| SL2912 | <i>cysC</i> | Adenylyl-sulfate kinase | -1,09 | -1,01 | 9,51 |
| SL2913 | <i>cysN</i> | Sulfate adenylyltransferase subunit 1 | 1,04 | 1,00 | 11,16 |
| SL2914 | <i>cysD</i> | Sulfate adenylyltransferase subunit 2 | 1,00 | -1,20 | 4,76 |
| SL2915 | <i>iap</i> | Alkaline phosphatase isozyme conversion protein | -1,08 | -1,03 | -3,91 |
| SL2916 | <i>ygbF</i> | Uncharacterized protein <i>ygbF</i> | 1,09 | -1,11 | -1,41 |
| SL2917 | <i>ygbT</i> | Uncharacterized protein <i>ygbT</i> | 1,14 | -1,39 | -1,25 |
| SL2918 | <i>ygcH</i> | Uncharacterized protein <i>ygcH</i> | 1,06 | -1,16 | -1,11 |
| SL2919 | <i>ygcI</i> | Uncharacterized protein <i>ygcI</i> | 1,06 | -1,23 | -1,25 |
| SL2920 | <i>ygcJ</i> | Uncharacterized protein <i>ygcJ</i> | 1,07 | -1,02 | -1,02 |
| SL2921 | - | Hypothetical | 1,05 | 1,04 | -1,02 |
| SL2922 | <i>ygcL</i> | Uncharacterized protein <i>ygcL</i> | 1,14 | -1,13 | -1,28 |
| SL2923 | <i>ygcB</i> | Uncharacterized protein <i>ygcB</i> | 1,43 | 1,36 | 1,33 |
| SL2924 | <i>sopD</i> | Secreted effector protein <i>sopD</i> | -1,52 | 1,19 | -23,34 |
| SL2925 | <i>cysH</i> | Phosphoadenosine phosphosulfate reductase | 1,07 | -1,06 | 5,34 |
| SL2926 | <i>cysI</i> | Sulfite reductase [NADPH] hemoprotein beta-component | 1,12 | -1,02 | 6,16 |
| SL2927 | <i>cysJ</i> | Sulfite reductase [NADPH] flavoprotein alpha-component | -1,07 | -1,06 | 4,34 |
| SL2928 | <i>queD</i> | 6-carboxy-5,6,7,8-tetrahydropterin synthase | -1,10 | 1,06 | -2,01 |
| SL2929 | - | Uncharacterized protein MJ0301 | 1,10 | 1,29 | 2,23 |
| SL2930 | <i>ygcF</i> | 7-carboxy-7-deazaguanine synthase homolog | -1,05 | -1,22 | -1,51 |
| SL2931 | <i>eno</i> | Enolase | 1,03 | -1,03 | -1,02 |
| SL2932 | <i>pyrG</i> | CTP synthase | 1,04 | 1,04 | -1,59 |
| SL2933 | <i>mazG</i> | Protein <i>mazG</i> | -1,03 | -1,15 | -1,57 |
| SL2934 | - | Hypothetical Protein SL2934 | 1,65 | 1,22 | -1,46 |
| SL2935 | - | Plasmid Stabilization System | 1,59 | 1,08 | -1,43 |
| SL2936 | - | Hypothetical | 1,30 | 1,22 | 1,07 |
| SL2937 | <i>relA</i> | GTP pyrophosphokinase | 1,03 | 1,10 | 1,02 |
| SL2938 | <i>rumA</i> | 23S rRNA (uracil-5-)methyltransferase <i>rumA</i> | 1,06 | 1,18 | -1,26 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL2939 | <i>barA</i> | Signal transduction histidine-protein kinase BarA | 1,13 | 1,08 | -1,56 |
| SL2940 | <i>garK</i> | Glycerate kinase 2 | 1,24 | 1,22 | 1,41 |
| SL2941 | <i>gudD</i> | Glucarate dehydratase | 1,21 | 1,12 | 1,87 |
| SL2942 | <i>gudX</i> | Glucarate dehydratase-related protein | 1,19 | 1,10 | 3,30 |
| SL2943 | <i>gudP</i> | Probable glucarate transporter | 1,30 | 1,14 | 5,33 |
| SL2944 | <i>yqcA</i> | Uncharacterized protein yqcA | 1,22 | 1,26 | 1,32 |
| SL2945 | <i>truC</i> | tRNA pseudouridine synthase C | 1,10 | -1,02 | -1,70 |
| SL2946 | <i>yqcC</i> | Uncharacterized protein yqcC | 1,31 | -1,09 | -2,86 |
| SL2947 | <i>syd</i> | Protein syd | 1,11 | 1,11 | -1,78 |
| SL2948 | <i>queF</i> | NADPH-dependent 7-cyano-7-deazaguanine reductase | 1,02 | -1,08 | -1,01 |
| SL2949 | <i>ygdH</i> | LOG family protein ygdH | 1,08 | -1,08 | 2,16 |
| SL2950 | <i>sdaC</i> | Serine transporter | -1,20 | -1,09 | 2,59 |
| SL2951 | <i>sdaB</i> | L-serine dehydratase 2 | 1,12 | -1,07 | 3,60 |
| SL2952 | <i>xni</i> | Uncharacterized exonuclease xni | -1,08 | -1,15 | -1,33 |
| SL2953 | <i>fucO</i> | Lactaldehyde reductase | 1,09 | -1,04 | 3,10 |
| SL2954 | <i>fucA</i> | L-fuculose phosphate aldolase | -1,08 | 1,00 | 2,94 |
| SL2955 | <i>fucP</i> | L-fucose-proton symporter | -1,13 | -1,08 | 1,34 |
| SL2956 | <i>fucI</i> | L-fucose isomerase | 1,14 | 1,10 | 1,26 |
| SL2957 | <i>fucK</i> | L-fuculokinase | 1,14 | -1,01 | 1,42 |
| SL2958 | <i>fucU</i> | L-fucose mutarotase | 1,07 | -1,01 | 1,75 |
| SL2959 | <i>fucR</i> | L-fucose operon activator | -1,02 | 1,03 | 2,02 |
| SL2960 | <i>rlmM</i> | Ribosomal RNA large subunit methyltransferase M | -1,10 | 1,02 | -1,55 |
| SL2961 | <i>ygdD</i> | UPF0382 inner membrane protein ygdD | -1,18 | -1,02 | -2,47 |
| SL2962 | <i>gcvA</i> | Glycine cleavage system transcriptional activator | -1,22 | 1,12 | -2,75 |
| SL2963 | <i>ygdI</i> | Uncharacterized lipoprotein ygdI | 1,09 | 1,12 | 1,07 |
| SL2964 | <i>csdA</i> | Cysteine sulfinate desulfinate | 1,14 | -1,03 | -1,26 |
| SL2965 | <i>ygdK</i> | Uncharacterized sufE-like protein ygdK | 1,09 | -1,11 | -1,14 |
| SL2966 | <i>rarD</i> | Protein rarD | 1,25 | -1,32 | -1,38 |
| SL2967 | <i>ygdL</i> | Uncharacterized protein ygdL | 1,18 | -1,13 | -1,42 |
| SL2968 | <i>mltA</i> | Membrane-bound lytic murein transglycosylase A | 1,08 | -1,08 | -1,72 |
| SL2969 | <i>amiC</i> | N-acetylmuramoyl-L-alanine amidase AmiC | -1,05 | 1,02 | -1,99 |
| SL2970 | <i>argA</i> | Amino-acid acetyltransferase | 1,15 | 1,23 | 1,35 |
| SL2971 | <i>recD</i> | Exodeoxyribonuclease V alpha chain | 1,37 | 1,13 | 1,45 |
| SL2972 | <i>recB</i> | Exodeoxyribonuclease V beta chain | 1,06 | -1,17 | 1,66 |
| SL2973 | <i>ptrA</i> | Protease 3 | -1,07 | -1,13 | -1,01 |
| SL2974 | <i>recC</i> | Exodeoxyribonuclease V gamma chain | 1,13 | -1,02 | 1,69 |
| SL2975 | <i>ppdC</i> | Prephilin peptidase-dependent protein C | -1,06 | -1,24 | 1,05 |
| SL2976 | <i>ygdB</i> | Uncharacterized protein ygdB | -1,29 | -1,22 | 1,21 |
| SL2977 | <i>ppdB</i> | Prephilin peptidase-dependent protein B | -1,28 | -1,11 | 2,36 |
| SL2978 | <i>ppdA</i> | Prephilin peptidase-dependent protein A | 1,03 | -1,14 | 1,23 |
| SL2979 | <i>thyA</i> | Thymidylate synthase | 1,04 | -1,03 | -2,07 |
| SL2980 | <i>lgt</i> | Prolipoprotein diacylglycerol transferase | 1,05 | 1,05 | -1,72 |
| SL2981 | <i>ptsP</i> | Phosphoenolpyruvate-protein phosphotransferase ptsP | 1,02 | 1,03 | -1,57 |
| SL2982 | <i>rppH</i> | RNA pyrophosphohydrolase | 1,05 | 1,11 | -1,15 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL2983 | <i>mutH</i> | DNA mismatch repair protein mutH | 1,14 | 1,11 | 1,09 |
| SL2984 | <i>ygdQ</i> | UPF0053 inner membrane protein ygdQ | -1,22 | 1,03 | -4,13 |
| SL2985 | <i>ygdR</i> | Uncharacterized lipoprotein ygdR | 1,33 | 1,27 | 1,09 |
| SL2986 | <i>tas</i> | Protein tas | 1,24 | 1,14 | 1,51 |
| SL2987 | <i>lptT</i> | Lysophospholipid transporter lptT | 1,07 | -1,16 | -1,08 |
| SL2988 | <i>aas</i> | Bifunctional protein aas | -1,09 | -1,20 | 1,05 |
| SL2989 | <i>galR</i> | HTH-type transcriptional regulator galR | 1,11 | 1,01 | 1,65 |
| SL2990 | <i>ascG</i> | HTH-type transcriptional regulator AscG | 1,02 | 1,06 | 1,43 |
| SL2991 | <i>lysA</i> | Diaminopimelate decarboxylase | -1,27 | -1,55 | -1,32 |
| SL2992 | <i>lysR</i> | Transcriptional activator protein lysR | 1,01 | -1,06 | 1,56 |
| SL2993 | <i>ygeA</i> | Uncharacterized protein ygeA | -1,04 | -1,17 | 1,38 |
| SL2994 | <i>araE</i> | Arabinose-proton symporter | 1,49 | 1,34 | 4,71 |
| SL2995 | <i>kduD</i> | 2-dehydro-3-deoxy-D-gluconate 5-dehydrogenase | -1,23 | -1,27 | 2,87 |
| SL2996 | <i>kduL</i> | 4-deoxy-L-threo-5-hexosulose-uronate ketol-isomerase | -1,33 | -1,48 | 3,46 |
| SL2997 | <i>yqeF</i> | Probable acetyl-CoA acetyltransferase | -1,08 | -1,04 | 4,20 |
| SL2998 | <i>aiIS</i> | HTH-type transcriptional activator AIIS | 1,11 | 1,11 | 1,19 |
| SL2999 | - | Hypothetical | 1,97 | 1,21 | -2,88 |
| SL3000 | <i>yqeG</i> | Inner membrane transport protein yqeG | 1,04 | -1,02 | -3,13 |
| SL3001 | <i>rcnR</i> | Transcriptional repressor rcnR | 1,00 | 1,27 | 1,49 |
| SL3002 | <i>rcnA</i> | Nickel/cobalt efflux system rcnA | -1,42 | 1,01 | -1,42 |
| SL3003 | - | Hypothetical | 1,04 | 1,06 | 1,52 |
| SL3004 | - | Hypothetical | -1,13 | 1,02 | 1,48 |
| SL3005 | - | Hypothetical | -1,00 | -1,09 | -1,07 |
| SL3006 | <i>papD</i> | Chaperone protein papD | -1,08 | 1,06 | -1,04 |
| SL3007 | <i>yqiG</i> | Putative outer membrane usher protein yqiG | -1,06 | -1,24 | 1,08 |
| SL3008 | <i>ybgD</i> | Uncharacterized fimbrial-like protein ybgD | 1,50 | 1,10 | 2,60 |
| SL3009 | <i>yfdX</i> | Protein yfdX | -1,07 | 1,09 | 1,74 |
| SL3010 | <i>pagC</i> | Virulence membrane protein pagC | -1,03 | 1,16 | 2,46 |
| SL3011 | - | Uncharacterized protein HI_0947 | 1,04 | -1,16 | -1,51 |
| SL3012 | - | Uncharacterized protein CP0246 | 1,04 | -1,02 | 1,36 |
| SL3013 | - | Hypothetical | -1,10 | 1,33 | 1,67 |
| SL3014 | <i>ygeR</i> | Uncharacterized lipoprotein ygeR | -1,07 | -1,05 | -1,43 |
| SL3015 | <i>idi</i> | Isopentenyl-diphosphate Delta-isomerase | 1,17 | 1,02 | -1,13 |
| SL3016 | <i>lysS</i> | Lysyl-tRNA synthetase | 1,15 | -1,01 | 1,28 |
| SL3017 | <i>prfB</i> | Peptide chain release factor 2 | -1,09 | -1,04 | -2,12 |
| SL3018 | <i>recJ</i> | Single-stranded-DNA-specific exonuclease recJ | 1,08 | -1,43 | -1,08 |
| SL3019 | <i>dsbC</i> | Thiol:disulfide interchange protein dsbC | -1,02 | -1,29 | 1,28 |
| SL3020 | <i>xerD</i> | Tyrosine recombinase xerD | 1,06 | -1,13 | 1,06 |
| SL3021 | <i>fldB</i> | Flavodoxin-2 | 1,29 | -1,03 | 1,05 |
| SL3022 | <i>ygfX</i> | Uncharacterized protein ygfX | 1,12 | -1,04 | 1,09 |
| SL3023 | <i>ygfY</i> | UPF0350 protein ygfY | 1,15 | 1,07 | 1,21 |
| SL3024 | <i>ygfZ</i> | tRNA-modifying protein ygfZ | -1,05 | -1,11 | 1,47 |
| SL3025 | <i>yqfA</i> | UPF0073 inner membrane protein yqfA | -1,01 | 1,19 | 1,34 |
| SL3026 | <i>yqfB</i> | UPF0267 protein yqfB | 1,20 | 1,27 | 2,53 |
| SL3027 | <i>bglA</i> | 6-phospho-beta-glucosidase BglA | 1,09 | -1,02 | -1,14 |
| SL3028 | - | Hypothetical | 1,21 | 1,12 | 1,22 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>greA</i> vs | <i>greB</i> vs | <i>greAgreB</i> |
|--------|--------------|---|----------------|----------------|-----------------|
| | | | WT | WT | vs WT |
| SL3029 | <i>gcvP</i> | Glycine dehydrogenase [decarboxylating] | 1,38 | -1,19 | 1,01 |
| SL3030 | <i>gcvH</i> | Glycine cleavage system H protein | 1,32 | -1,13 | -1,04 |
| SL3031 | <i>gcvT</i> | Aminomethyltransferase | 1,11 | -1,23 | -1,08 |
| SL3032 | <i>visC</i> | Protein visC | 1,09 | -1,04 | -1,29 |
| SL3033 | <i>ubiH</i> | 2-octaprenyl-6-methoxyphenol hydroxylase | 1,05 | -1,07 | 1,15 |
| SL3034 | <i>pepP</i> | Xaa-Pro aminopeptidase | 1,11 | 1,07 | 1,37 |
| SL3035 | <i>ygfB</i> | UPF0149 protein ygfB | -1,02 | 1,02 | -1,06 |
| SL3036 | <i>zapA</i> | Cell division protein zapA | -1,00 | -1,04 | -1,20 |
| SL3037 | <i>ygfA</i> | Uncharacterized protein ygfA | 1,32 | 1,15 | -1,05 |
| SL3038 | <i>serA</i> | D-3-phosphoglycerate dehydrogenase | -1,06 | -1,12 | 1,08 |
| SL3039 | <i>rpiA</i> | Ribose-5-phosphate isomerase A | -1,05 | -1,14 | 1,40 |
| SL3040 | <i>iciA</i> | Chromosome initiation inhibitor | 1,05 | 1,14 | -1,29 |
| SL3041 | <i>yggE</i> | Uncharacterized protein yggE | -1,05 | 1,12 | -2,34 |
| SL3042 | <i>argO</i> | Arginine exporter protein ArgO | 1,04 | -1,23 | -1,49 |
| SL3043 | <i>mscS</i> | Small-conductance mechanosensitive channel | -1,11 | -1,26 | 1,21 |
| SL3044 | <i>fbaA</i> | Fructose-bisphosphate aldolase class 2 | 1,11 | -1,03 | -1,08 |
| SL3045 | <i>pgk</i> | Phosphoglycerate kinase | 1,14 | 1,01 | -1,19 |
| SL3046 | <i>epd</i> | D-erythrose-4-phosphate dehydrogenase | 1,30 | 1,04 | -1,68 |
| SL3047 | <i>glmU</i> | Bifunctional protein glmU | 1,17 | -1,15 | 1,59 |
| SL3048 | - | Hypothetical | 1,34 | -1,23 | 3,16 |
| SL3049 | - | Permease Protein Of ABC-Type Cobalt Transporter | 1,38 | -1,21 | 2,71 |
| SL3050 | <i>cbiO1</i> | Cobalt import ATP-binding protein CbiO 1 | 1,19 | -1,37 | 2,22 |
| SL3051 | <i>cbiO</i> | Cobalt import ATP-binding protein CbiO | 1,32 | -1,15 | 2,12 |
| SL3052 | <i>tktA</i> | Transketolase 1 | 1,10 | -1,15 | 1,90 |
| SL3053 | <i>yggG</i> | Uncharacterized metalloprotease yggG | 1,06 | 1,13 | -1,48 |
| SL3054 | <i>speB</i> | Agmatinase | 1,37 | 1,21 | 1,21 |
| SL3055 | <i>yisY</i> | AB hydrolase superfamily protein yisY | -1,26 | 1,14 | -1,41 |
| SL3056 | <i>yjgK</i> | Uncharacterized protein yjgK | 1,15 | 1,08 | 1,21 |
| SL3057 | <i>yjmC</i> | Uncharacterized oxidoreductase yjmC | 1,12 | -1,35 | 2,33 |
| SL3058 | <i>yjjN</i> | Uncharacterized zinc-type alcohol dehydrogenase-like protein yjjN | -1,14 | -1,30 | 2,01 |
| SL3059 | <i>uxuB</i> | D-mannonate oxidoreductase | -1,09 | -1,19 | 3,52 |
| SL3060 | <i>uxuR</i> | Uxu operon regulator | 1,11 | -1,10 | 1,27 |
| SL3061 | - | Hypothetical | -1,16 | 1,17 | -1,17 |
| SL3062 | <i>speA</i> | Biosynthetic arginine decarboxylase | 1,19 | 1,11 | 1,06 |
| SL3063 | <i>yqgB</i> | Hypothetical | 1,17 | 1,17 | -1,64 |
| SL3064 | <i>yqgD</i> | Uncharacterized protein yqgD | -1,10 | 1,08 | -4,69 |
| SL3065 | <i>metK</i> | S-adenosylmethionine synthase | -1,11 | -1,17 | -2,26 |
| SL3066 | <i>galP</i> | Galactose-proton symporter | -1,31 | 1,06 | 1,25 |
| SL3067 | <i>sprT</i> | Protein sprT | 1,15 | -1,27 | -1,42 |
| SL3068 | <i>endA</i> | Endonuclease-1 | -1,20 | -1,03 | -1,06 |
| SL3069 | <i>rsmE</i> | Ribosomal RNA small subunit methyltransferase E | 1,00 | -1,02 | -1,62 |
| SL3070 | <i>gshB</i> | Glutathione synthetase | 1,18 | 1,02 | 1,07 |
| SL3071 | <i>yqgE</i> | UPF0301 protein yqgE | -1,16 | -1,21 | -1,74 |
| SL3072 | <i>yqgF</i> | Putative Holliday junction resolvase | 1,02 | -1,14 | -1,46 |
| SL3073 | - | Hypothetical | 1,07 | -1,07 | -1,49 |
| SL3074 | <i>yggR</i> | Uncharacterized protein yggR | -1,04 | 1,08 | 1,41 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL3075 | <i>yggS</i> | UPF0001 protein yggS | -1,04 | -1,03 | -1,69 |
| SL3076 | <i>yggT</i> | Uncharacterized protein yggT | 1,05 | -1,10 | -1,26 |
| SL3077 | <i>yggU</i> | UPF0235 protein CKO_04329 | -1,01 | -1,16 | -1,35 |
| SL3078 | <i>rdgB</i> | Nucleoside-triphosphatase rdgB | 1,09 | -1,18 | -1,08 |
| SL3079 | <i>yggW</i> | Oxygen-independent coproporphyrinogen-III oxidase-like protein yggW | 1,01 | -1,28 | -1,16 |
| SL3080 | <i>yggM</i> | Uncharacterized protein yggM | 1,70 | -1,04 | 2,39 |
| SL3081 | <i>ansB</i> | L-asparaginase 2 | 1,62 | 1,25 | 4,33 |
| SL3082 | <i>yggN</i> | Uncharacterized protein yggN | -1,17 | -1,12 | -1,33 |
| SL3083 | <i>yggL</i> | Uncharacterized protein yggL | -1,06 | 1,05 | -1,01 |
| SL3084 | <i>trmB</i> | tRNA (guanine-N(7)-)methyltransferase | -1,07 | 1,16 | -1,30 |
| SL3085 | <i>mutY</i> | A/G-specific adenine glycosylase | -1,13 | -1,16 | -2,32 |
| SL3086 | <i>yggX</i> | Probable Fe(2+)-trafficking protein | -1,09 | -1,11 | -1,47 |
| SL3087 | <i>mltC</i> | Membrane-bound lytic murein transglycosylase C | 1,06 | -1,11 | -1,16 |
| SL3088 | <i>nupG</i> | Nucleoside permease nupG | 1,14 | 1,19 | 2,45 |
| SL3089 | <i>speC</i> | Ornithine decarboxylase, constitutive | 1,05 | 1,15 | 1,12 |
| SL3090 | <i>yqgA</i> | Uncharacterized protein yqgA | 1,17 | -1,09 | -1,71 |
| SL3091 | - | Virulence protein STM3117 | 1,01 | -1,12 | -1,24 |
| SL3092 | <i>cat2</i> | 4-hydroxybutyrate coenzyme A transferase | 1,04 | -1,02 | -1,05 |
| SL3093 | <i>maoC</i> | MaoC Domain Protein Dehydratase | 1,16 | 1,28 | 1,10 |
| SL3094 | <i>citE</i> | Citrate lyase subunit beta | 1,04 | 1,22 | 1,96 |
| SL3095 | <i>budR</i> | HTH-type transcriptional regulator BudR | 1,05 | -1,27 | 2,43 |
| SL3096 | <i>atsA</i> | Arylsulfatase | 1,00 | -1,12 | 1,54 |
| SL3097 | <i>atsB</i> | Anaerobic sulfatase-maturing enzyme | -1,33 | -1,08 | -1,13 |
| SL3098 | <i>moaR</i> | Monoamine regulon transcriptional regulator | 1,11 | 1,43 | 2,42 |
| SL3099 | - | Hypothetical | -1,08 | 1,03 | -1,09 |
| SL3100 | <i>steT</i> | Serine/threonine exchanger steT | 1,09 | 1,15 | 1,20 |
| SL3101 | - | Hypothetical | -1,14 | -1,19 | 1,09 |
| SL3102 | <i>puuB</i> | Gamma-glutamylputrescine oxidoreductase | -1,00 | 1,30 | -1,36 |
| SL3103 | <i>feaB</i> | Phenylacetaldehyde dehydrogenase | 1,10 | 1,20 | 1,04 |
| SL3104 | <i>iraD</i> | Anti-adapter protein iraD | 1,41 | 1,15 | 1,59 |
| SL3105 | - | Hypothetical | 1,68 | 1,43 | 1,34 |
| SL3106 | - | Polysaccharide Deacetylase | -1,96 | 1,79 | -1,43 |
| SL3107 | <i>yhcX</i> | UPF0012 hydrolase yhcX | -1,88 | 1,67 | -1,60 |
| SL3108 | <i>exuT</i> | Hexuronate transporter | 1,24 | 1,15 | 4,36 |
| SL3109 | <i>uxuA</i> | Mannose dehydratase | 1,21 | -1,08 | 3,06 |
| SL3110 | <i>uxuB</i> | D-mannose oxidoreductase | 1,20 | -1,03 | 2,95 |
| SL3111 | <i>uxaC</i> | Uronate isomerase | 1,15 | 1,04 | 2,61 |
| SL3112 | <i>bdlA</i> | Biofilm dispersion protein BdlA | -1,33 | -1,01 | -3,40 |
| SL3113 | <i>gsp</i> | Bifunctional glutathionylspermidine synthetase/amidase | 1,15 | 1,10 | -1,05 |
| SL3114 | <i>yghU</i> | Uncharacterized GST-like protein yghU | 1,14 | 1,17 | 1,53 |
| SL3115 | - | Uncharacterized protein PM1146 | 1,29 | -1,06 | 1,11 |
| SL3116 | - | Uncharacterized protein HI_1472 | 1,11 | -1,19 | 1,15 |
| SL3117 | <i>hybG</i> | Hydrogenase-2 operon protein hybG | 1,36 | 1,19 | -1,33 |
| SL3118 | <i>hybF</i> | Probable hydrogenase nickel incorporation protein hybF | 1,23 | -1,08 | -1,50 |
| SL3119 | <i>hybE</i> | Hydrogenase-2 operon protein hybE | 1,32 | -1,18 | -1,14 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|---------------|--|-----------------------|-----------------------|---------------------------|
| SL3120 | <i>hybD</i> | Hydrogenase 2 maturation protease | 1,32 | -1,08 | 1,10 |
| SL3121 | <i>hybC</i> | Hydrogenase-2 large chain | 1,30 | -1,15 | 1,08 |
| SL3122 | <i>hybB</i> | Probable Ni/Fe-hydrogenase 2 b-type cytochrome subunit | 1,27 | -1,23 | 1,09 |
| SL3123 | <i>hybA</i> | Hydrogenase-2 operon protein <i>hybA</i> | 1,28 | 1,02 | 1,14 |
| SL3124 | <i>hybO</i> | Hydrogenase-2 small chain | 1,17 | 1,08 | 1,11 |
| SL3125 | <i>yghW</i> | Uncharacterized protein <i>yghW</i> | -1,36 | 1,16 | -6,35 |
| SL3126 | <i>tse</i> | Methyl-accepting chemotaxis serine transducer | -1,55 | 1,00 | -8,28 |
| SL3127 | <i>yqhA</i> | UPF0114 protein <i>yqhA</i> | -1,01 | 1,09 | -1,62 |
| SL3128 | - | Hypothetical | -1,27 | 1,12 | -2,72 |
| SL3129 | - | Hypothetical | -1,27 | 1,09 | -5,12 |
| SL3130 | - | Hypothetical | -1,43 | -1,26 | -7,27 |
| SL3131 | <i>yghA</i> | Uncharacterized oxidoreductase <i>yghA</i> | 1,05 | -1,10 | 1,44 |
| SL3132 | <i>exbD</i> | Biopolymer transport protein <i>exbD</i> | 1,20 | 1,13 | -2,14 |
| SL3133 | <i>exbB</i> | Biopolymer transport protein <i>exbB</i> | 1,04 | 1,15 | -2,24 |
| SL3134 | <i>b3007;</i> | Hypothetical | 1,31 | 1,37 | 1,27 |
| SL3135 | <i>metC</i> | Cystathionine beta-lyase | 1,16 | -1,09 | 1,31 |
| SL3136 | <i>yghB</i> | Inner membrane protein <i>yghB</i> | 1,14 | 1,16 | -1,44 |
| SL3137 | <i>yqhC</i> | Uncharacterized HTH-type transcriptional regulator <i>yqhC</i> | 1,26 | 1,08 | 1,10 |
| SL3138 | <i>yqhD</i> | Alcohol dehydrogenase <i>yqhD</i> | 1,07 | 1,14 | 2,16 |
| SL3139 | <i>dkgA</i> | 2,5-diketo-D-gluconic acid reductase A | 1,07 | 1,06 | 1,93 |
| SL3140 | <i>yfIS</i> | Putative malate transporter <i>yfIS</i> | -1,24 | 1,14 | -1,79 |
| SL3141 | - | Uncharacterized HIT-like protein MJ0866 | 1,07 | 1,02 | 1,05 |
| SL3142 | <i>ygiQ</i> | UPF0313 protein <i>ygiQ</i> | -1,38 | 1,18 | -2,01 |
| SL3143 | <i>yiiZ</i> | Uncharacterized protein <i>yiiZ</i> | -1,25 | -1,05 | 7,98 |
| SL3144 | - | C4-Dicarboxylate Transport System Permease Small Protein | -1,43 | -1,29 | 6,19 |
| SL3145 | <i>ygiK</i> | Uncharacterized protein <i>ygiK</i> | -1,14 | -1,20 | 3,14 |
| SL3146 | <i>sufI</i> | Protein <i>sufI</i> | -1,04 | -1,14 | -1,20 |
| SL3147 | <i>plsC</i> | 1-acyl-sn-glycerol-3-phosphate acyltransferase | 1,06 | -1,03 | -1,30 |
| SL3148 | <i>parC</i> | DNA topoisomerase 4 subunit A | -1,27 | -1,10 | -1,77 |
| SL3149 | <i>ygiV</i> | Probable transcriptional regulator <i>ygiV</i> | 1,05 | 1,07 | 1,08 |
| SL3150 | <i>ygiW</i> | Protein <i>ygiW</i> | 1,35 | 1,23 | 1,98 |
| SL3151 | <i>qseB</i> | Transcriptional regulatory protein <i>qseB</i> | 1,02 | -1,14 | 1,24 |
| SL3152 | <i>qseC</i> | Sensor protein <i>qseC</i> | -1,02 | -1,14 | -1,20 |
| SL3153 | <i>mdaB</i> | Modulator of drug activity B | 1,06 | -1,01 | 1,10 |
| SL3154 | <i>ygiN</i> | Probable quinol monooxygenase <i>ygiN</i> | 1,26 | 1,03 | 1,26 |
| SL3155 | <i>parE</i> | DNA topoisomerase 4 subunit B | 1,03 | -1,09 | -1,53 |
| SL3156 | <i>yqiA</i> | Esterase <i>yqiA</i> | 1,19 | -1,05 | -1,30 |
| SL3157 | <i>icc</i> | Protein <i>icc</i> | 1,18 | 1,07 | -1,06 |
| SL3158 | <i>yqiB</i> | Uncharacterized protein <i>yqiB</i> | -1,05 | -1,11 | -1,25 |
| SL3159 | <i>nudF</i> | ADP-ribose pyrophosphatase | -1,05 | -1,02 | -1,31 |
| SL3160 | <i>tolC</i> | Outer membrane protein <i>tolC</i> | 1,05 | 1,09 | 1,41 |
| SL3161 | <i>ygiB</i> | UPF0441 protein <i>ygiB</i> | 1,07 | 1,00 | 1,69 |
| SL3162 | <i>ygiC</i> | Uncharacterized protein <i>ygiC</i> | 1,05 | -1,07 | 1,38 |
| SL3163 | <i>ygiD</i> | Uncharacterized protein <i>ygiD</i> | -2,08 | 1,12 | -9,28 |
| SL3164 | <i>zupT</i> | Zinc transporter <i>zupT</i> | 1,44 | 1,26 | 1,25 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL3165 | - | Arylsulfotransferase | -1,13 | -1,15 | 3,35 |
| SL3166 | <i>dsbA</i> | Thiol:disulfide interchange protein <i>dsbA</i> | -1,19 | -1,13 | 3,06 |
| SL3167 | <i>dsbB</i> | Putative protein-disulfide oxidoreductase | -1,31 | -1,22 | 3,38 |
| SL3168 | <i>ribB</i> | 3,4-dihydroxy-2-butanone 4-phosphate synthase | -1,31 | -1,05 | -1,73 |
| SL3169 | <i>yqiC</i> | Uncharacterized protein <i>yqiC</i> | 1,05 | 1,12 | 1,42 |
| SL3170 | <i>glgS</i> | Glycogen synthesis protein <i>glgS</i> | 1,26 | 1,60 | 2,05 |
| SL3171 | <i>yqiJ</i> | Inner membrane protein <i>yqiJ</i> | -1,24 | -1,07 | -1,03 |
| SL3172 | <i>yqiK</i> | Inner membrane protein <i>yqiK</i> | 1,17 | -1,05 | -1,06 |
| SL3173 | <i>hldE</i> | Bifunctional protein <i>hldE</i> | -1,02 | 1,00 | -1,17 |
| SL3174 | <i>glnE</i> | Glutamate-ammonia-ligase adenylyltransferase | 1,08 | -1,07 | 1,51 |
| SL3175 | <i>ygiF</i> | Uncharacterized protein <i>ygiF</i> | 1,13 | -1,04 | -1,19 |
| SL3176 | <i>ygiM</i> | Uncharacterized protein <i>ygiM</i> | -1,23 | 1,09 | -3,56 |
| SL3177 | <i>cca</i> | Multifunctional CCA protein | 1,07 | 1,08 | -1,52 |
| SL3178 | <i>uppP</i> | Undecaprenyl-diphosphatase | -1,19 | -1,11 | -2,21 |
| SL3179 | <i>folB</i> | Dihydronoopterin aldolase | -1,39 | -1,02 | -2,66 |
| SL3180 | <i>pIsY</i> | Glycerol-3-phosphate acyltransferase | 1,05 | 1,13 | -1,24 |
| SL3181 | - | Hypothetical | 1,11 | 1,16 | -1,38 |
| SL3182 | <i>gcp</i> | Probable O-sialoglycoprotein endopeptidase | -1,07 | 1,10 | -1,62 |
| SL3183 | <i>rpsU</i> | 30S ribosomal protein S21 | -1,10 | 1,23 | -3,63 |
| SL3184 | <i>dnaG</i> | DNA primase | -1,03 | 1,12 | -2,31 |
| SL3185 | <i>rpoD</i> | RNA polymerase sigma factor <i>rpoD</i> | 1,08 | 1,07 | -1,10 |
| SL3186 | <i>mug</i> | G/U mismatch-specific DNA glycosylase | 1,13 | 1,13 | 1,95 |
| SL3187 | <i>yqjH</i> | Uncharacterized protein <i>yqjH</i> | -1,04 | 1,14 | -1,17 |
| SL3188 | <i>yqjI</i> | Uncharacterized protein <i>yqjI</i> | 1,06 | 1,32 | 1,63 |
| SL3189 | <i>tse</i> | Methyl-accepting chemotaxis serine transducer | -1,38 | -1,15 | -3,94 |
| SL3190 | <i>aer</i> | Aerotaxis receptor | -1,22 | -1,40 | 1,59 |
| SL3191 | <i>patA</i> | Putrescine aminotransferase | -1,03 | 1,04 | 1,44 |
| SL3192 | <i>fadH</i> | 2,4-dienoyl-CoA reductase [NADPH] | -1,06 | 1,12 | 6,90 |
| SL3193 | <i>rlmG</i> | Ribosomal RNA large subunit methyltransferase G | -1,01 | 1,07 | -1,52 |
| SL3194 | <i>ygiP</i> | Uncharacterized protein <i>ygiP</i> | 1,09 | -1,07 | -1,26 |
| SL3195 | <i>ygiQ</i> | Uncharacterized protein <i>ygiQ</i> | 1,06 | 1,09 | -1,69 |
| SL3196 | <i>ygiR</i> | Uncharacterized oxidoreductase <i>ygiR</i> | 1,34 | 1,05 | 2,00 |
| SL3197 | <i>alx</i> | Inner membrane protein <i>alx</i> | -1,24 | -1,08 | -2,21 |
| SL3198 | <i>sstT</i> | Serine/threonine transporter <i>sstT</i> | -1,05 | 1,04 | 2,88 |
| SL3199 | <i>yqjA</i> | Inner membrane protein <i>yqjA</i> | -1,37 | 1,17 | -2,94 |
| SL3200 | <i>yqjB</i> | Uncharacterized protein <i>yqjB</i> | -1,21 | 1,17 | -3,22 |
| SL3201 | <i>yqjC</i> | Protein <i>yqjC</i> | 1,03 | 1,18 | 1,23 |
| SL3202 | <i>yqjE</i> | Inner membrane protein <i>yqjE</i> | 1,09 | 1,06 | 1,66 |
| SL3203 | <i>yqjK</i> | Uncharacterized protein <i>yqjK</i> | 1,06 | 1,07 | 1,64 |
| SL3204 | <i>yqjF</i> | Inner membrane protein <i>yqjF</i> | 1,44 | -1,13 | 1,13 |
| SL3205 | <i>yqjG</i> | Uncharacterized protein <i>yqjG</i> | 1,10 | 1,08 | 2,48 |
| SL3206 | <i>yhaH</i> | Inner membrane protein <i>yhaH</i> | 1,01 | -1,06 | 1,28 |
| SL3207 | <i>yhaJ</i> | Uncharacterized HTH-type transcriptional regulator <i>yhaJ</i> | 1,03 | 1,08 | -1,27 |
| SL3208 | <i>yhaK</i> | Pirin-like protein <i>yhaK</i> | 1,23 | 1,30 | 1,40 |
| SL3209 | <i>yhaL</i> | Hypothetical Protein <i>yhaL</i> | 1,20 | 1,49 | 5,32 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>greA</i> vs | <i>greB</i> vs | <i>greAgreB</i> |
|--------|-------------|---|----------------|----------------|-----------------|
| | | | WT | WT | vs WT |
| SL3210 | <i>yhaM</i> | UPF0597 protein yhaM | 1,20 | 1,14 | 1,14 |
| SL3211 | <i>yhaO</i> | Inner membrane transport protein yhaO | 1,06 | 1,03 | 2,15 |
| SL3212 | <i>tdcG</i> | L-serine dehydratase tdcG | 1,10 | 1,03 | -1,55 |
| SL3213 | <i>tdcE</i> | Keto-acid formate acetyltransferase | 1,10 | 1,00 | -1,87 |
| SL3214 | <i>tdcD</i> | Propionate kinase | 1,02 | 1,22 | -2,52 |
| SL3215 | <i>tdcC</i> | Threonine/serine transporter tdcC | -1,13 | 1,19 | -1,88 |
| SL3216 | <i>tdcB</i> | Threonine dehydratase catabolic | -1,26 | 1,33 | -2,06 |
| SL3217 | <i>tdcA</i> | HTH-type transcriptional regulator tdcA | 1,55 | 1,55 | 5,57 |
| SL3218 | - | Hypothetical | 1,02 | 1,00 | -1,10 |
| SL3219 | - | Hypothetical | 1,00 | 1,33 | -1,22 |
| SL3220 | <i>garK</i> | Glycerate kinase 2 | 1,09 | -1,07 | 1,56 |
| SL3221 | <i>garR</i> | 2-hydroxy-3-oxopropionate reductase | 1,25 | 1,22 | 1,72 |
| SL3222 | <i>garL</i> | 5-keto-4-deoxy-D-glucarate aldolase | 1,27 | 1,19 | 2,25 |
| SL3223 | <i>garD</i> | D-galactarate dehydratase | 1,28 | 1,27 | 2,13 |
| SL3224 | <i>ydjE</i> | Uncharacterized sugar kinase ydjE | -1,04 | 1,04 | 1,97 |
| SL3225 | <i>glpR</i> | Glycerol-3-phosphate regulon repressor | 1,07 | 1,08 | 1,57 |
| SL3226 | <i>gatY</i> | D-tagatose-1,6-bisphosphate aldolase subunit gatY | 1,03 | 1,06 | -1,57 |
| SL3227 | <i>fruK</i> | 1-phosphofructokinase | -1,26 | -1,39 | -2,73 |
| SL3228 | <i>fruA</i> | PTS system fructose-specific EIIABC component | -1,11 | -1,19 | -2,11 |
| SL3229 | <i>fruB</i> | Multiphosphoryl transfer protein | -1,34 | -1,41 | -2,50 |
| SL3230 | <i>gatZ</i> | D-tagatose-1,6-bisphosphate aldolase subunit gatZ | 1,04 | -1,33 | -1,67 |
| SL3231 | <i>gatA</i> | Galactitol-specific phosphotransferase enzyme IIA component | -1,31 | -1,28 | 1,01 |
| SL3232 | <i>gatB</i> | Galactitol-specific phosphotransferase enzyme IIB component | -1,11 | -1,16 | 2,08 |
| SL3233 | <i>gatC</i> | Galactitol permease IIC component | 1,08 | 1,01 | 2,52 |
| SL3234 | <i>gatD</i> | Galactitol-1-phosphate 5-dehydrogenase | 1,13 | 1,02 | 1,05 |
| SL3235 | <i>gatR</i> | Galactitol utilization operon repressor | 1,07 | -1,04 | 4,26 |
| SL3236 | <i>rsml</i> | Ribosomal RNA small subunit methyltransferase I | 1,10 | 1,14 | -1,68 |
| SL3237 | <i>yraM</i> | Uncharacterized protein yraM | 1,02 | 1,01 | -1,63 |
| SL3238 | <i>yraN</i> | UPF0102 protein yraN | 1,13 | 1,05 | -1,85 |
| SL3239 | <i>diaA</i> | DnaA initiator-associating protein diaA | -1,01 | 1,01 | -1,47 |
| SL3240 | <i>yraP</i> | Uncharacterized protein yraP | -1,08 | -1,05 | -1,02 |
| SL3241 | <i>yraR</i> | Uncharacterized protein yraR | 1,09 | 1,11 | 1,04 |
| SL3242 | <i>yhbO</i> | Protein yhbO | -1,00 | 1,02 | 1,40 |
| SL3243 | <i>yhbP</i> | UPF0306 protein yhbP | 1,20 | 1,07 | -1,26 |
| SL3244 | <i>yhbQ</i> | UPF0213 protein yhbQ | 1,15 | -1,02 | -1,15 |
| SL3245 | <i>yhbS</i> | Uncharacterized N-acetyltransferase yhbS | 1,22 | 1,28 | 1,37 |
| SL3246 | <i>yhbT</i> | Uncharacterized protein yhbT | 1,27 | 1,33 | 1,57 |
| SL3247 | <i>yhbU</i> | Uncharacterized protease yhbU | -1,02 | -1,27 | -1,56 |
| SL3248 | <i>yhbV</i> | Uncharacterized protein yhbV | 1,09 | -1,84 | 1,05 |
| SL3249 | <i>yhbW</i> | Uncharacterized protein yhbW | -1,37 | -1,38 | 2,08 |
| SL3250 | <i>yafK</i> | Putative L,D-transpeptidase YafK | -1,02 | 1,18 | 1,09 |
| SL3251 | - | Conserved Hypothetical Protein | -1,02 | -1,10 | 1,01 |
| SL3252 | <i>mtr</i> | Tryptophan-specific transport protein | -1,22 | -1,07 | -2,62 |
| SL3253 | <i>deaD</i> | Cold-shock DEAD box protein A | -1,04 | -1,06 | -8,59 |
| SL3254 | <i>npl</i> | Lipoprotein npl | -1,06 | -1,00 | -1,86 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL3255 | <i>pnp</i> | Polyribonucleotide nucleotidyltransferase | 1,11 | 1,01 | -1,21 |
| SL3256 | <i>rpsO</i> | 30S ribosomal protein S15 | -1,05 | -1,03 | -1,45 |
| SL3257 | <i>truB</i> | tRNA pseudouridine synthase B | 1,10 | -1,14 | -1,30 |
| SL3258 | <i>rbfA</i> | Ribosome-binding factor A | 1,11 | 1,01 | -1,06 |
| SL3259 | <i>infB</i> | Translation initiation factor IF-2 | 1,09 | 1,01 | -1,02 |
| SL3260 | <i>nusA</i> | Transcription elongation protein nusA | -1,14 | -1,12 | -1,59 |
| SL3261 | <i>rimP</i> | Ribosome maturation factor rimP | -1,28 | -1,08 | -2,79 |
| SL3262 | <i>argG</i> | Argininosuccinate synthase | 1,23 | -1,12 | 1,18 |
| SL3263 | - | Hypothetical | -1,04 | 1,35 | -2,48 |
| SL3264 | <i>secG</i> | Protein-export membrane protein secG | -1,16 | 1,05 | -2,46 |
| SL3265 | <i>glmM</i> | Phosphoglucosamine mutase | 1,20 | -1,20 | 1,41 |
| SL3266 | <i>folP</i> | Dihydropteroate synthase | 1,18 | -1,10 | 1,24 |
| SL3268 | <i>ftsH</i> | Cell division protease ftsH | 1,27 | -1,11 | -1,54 |
| SL3269 | <i>rlmE</i> | Ribosomal RNA large subunit methyltransferase E | 1,72 | 1,13 | -1,17 |
| SL3270 | <i>yhbY</i> | RNA-binding protein yhbY | 2,18 | 1,01 | 1,19 |
| SL3271 | <i>greA</i> | Transcription elongation factor greA | -97,36 | 1,03 | -320,40 |
| SL3272 | <i>dacB</i> | D-alanyl-D-alanine carboxypeptidase dacB | 1,05 | 1,04 | -1,86 |
| SL3273 | <i>obg</i> | GTPase obg | 1,05 | 1,03 | -1,81 |
| SL3274 | <i>yhbE</i> | Uncharacterized inner membrane transporter yhbE | -1,01 | -1,08 | -1,81 |
| SL3275 | <i>rpmA</i> | 50S ribosomal protein L27 | -1,33 | -1,01 | -3,03 |
| SL3276 | <i>rplU</i> | 50S ribosomal protein L21 | -1,20 | 1,03 | -2,51 |
| SL3277 | <i>ispB</i> | Octaprenyl-diphosphate synthase | -1,05 | 1,08 | 1,08 |
| SL3278 | <i>sfsB</i> | Sugar fermentation stimulation protein B | 1,17 | 1,05 | 1,06 |
| SL3279 | <i>murA</i> | UDP-N-acetylglucosamine 1-carboxyvinyltransferase | 1,00 | -1,11 | -1,36 |
| SL3280 | <i>yrbA</i> | Uncharacterized protein yrbA | 1,01 | 1,03 | -1,97 |
| SL3281 | <i>mlaB</i> | Probable phospholipid ABC transporter-binding protein mlaB | 1,05 | 1,03 | -1,21 |
| SL3282 | <i>mlaC</i> | Probable phospholipid-binding protein mlaC | -1,00 | -1,03 | -1,08 |
| SL3283 | <i>mlaD</i> | Probable phospholipid ABC transporter-binding protein mlaD | -1,08 | -1,15 | -1,29 |
| SL3284 | <i>mlaE</i> | Probable phospholipid ABC transporter permease protein mlaE | -1,15 | -1,10 | -1,98 |
| SL3285 | <i>mlaF</i> | Probable phospholipid import ATP-binding protein mlaF | -1,19 | 1,00 | -1,85 |
| SL3286 | <i>yrbG</i> | Inner membrane protein yrbG | 1,01 | 1,15 | -1,82 |
| SL3287 | <i>kdsD</i> | Arabinose 5-phosphate isomerase | 1,08 | -1,02 | -1,81 |
| SL3288 | <i>kdsC</i> | 3-deoxy-D-manno-octulosonate 8-phosphate phosphatase | 1,02 | -1,12 | -1,34 |
| SL3289 | <i>lptC</i> | Lipopolysaccharide export system protein lptC | 1,06 | -1,02 | -1,19 |
| SL3290 | <i>lptA</i> | Lipopolysaccharide export system protein lptA | 1,06 | -1,07 | -1,12 |
| SL3291 | <i>lptB</i> | Lipopolysaccharide export system ATP-binding protein lptB | 1,06 | -1,05 | -1,08 |
| SL3292 | <i>rpoN</i> | RNA polymerase sigma-54 factor | 1,01 | -1,04 | -1,21 |
| SL3293 | <i>yhbH</i> | Probable sigma(54) modulation protein | 1,24 | 1,43 | 2,78 |
| SL3294 | <i>ptsN</i> | Nitrogen regulatory protein | 1,19 | 1,06 | 2,57 |
| SL3295 | <i>yhbJ</i> | UPF0042 nucleotide-binding protein PC1_0271 | 1,16 | -1,02 | 1,54 |
| SL3296 | <i>ptsO</i> | Phosphocarrier protein NPr | 1,21 | -1,07 | 1,52 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL3297 | <i>yrbL</i> | Uncharacterized protein yrbL | 1,26 | 1,34 | 1,76 |
| SL3298 | <i>mtgA</i> | Monofunctional biosynthetic peptidoglycan transglycosylase | 1,03 | -1,19 | 1,29 |
| SL3299 | <i>elbB</i> | Enhancing lycopene biosynthesis protein 2 | 1,17 | 1,12 | 1,58 |
| SL3300 | <i>arcB</i> | Aerobic respiration control sensor protein ArcB | 1,17 | -1,00 | 1,22 |
| SL3301 | <i>yhcC</i> | Uncharacterized protein yhcC | 1,03 | 1,15 | -3,69 |
| SL3302 | <i>gltB</i> | Glutamate synthase [NADPH] large chain | 1,27 | 1,12 | 2,44 |
| SL3303 | <i>gltD</i> | Glutamate synthase [NADPH] small chain | 1,26 | 1,03 | 2,37 |
| SL3304 | <i>yhcG</i> | Uncharacterized protein yhcG | -1,30 | 1,05 | 1,35 |
| SL3305 | <i>codB</i> | Cytosine permease | -1,49 | 1,05 | -1,80 |
| SL3306 | <i>codA</i> | Cytosine deaminase | -1,15 | 1,09 | -1,13 |
| SL3307 | <i>yhcH</i> | Uncharacterized protein yhcH | 1,60 | 1,04 | 2,30 |
| SL3308 | <i>nanK</i> | N-acetylmannosamine kinase | 1,30 | -1,18 | 2,02 |
| SL3309 | <i>nanE2</i> | Putative N-acetylmannosamine-6-phosphate 2-epimerase 2 | 1,27 | -1,23 | 1,86 |
| SL3310 | <i>nanT1</i> | Putative sialic acid transporter 1 | 1,28 | -1,14 | 1,56 |
| SL3311 | <i>nanA</i> | N-acetylneuraminate lyase | 1,50 | -1,09 | 1,42 |
| SL3312 | <i>nanR</i> | Transcriptional regulator nanR | 1,06 | -1,03 | 1,09 |
| SL3313 | <i>sspB</i> | Stringent starvation protein B | -1,27 | -1,08 | -2,06 |
| SL3314 | <i>sspA</i> | Stringent starvation protein A | -1,25 | -1,02 | -2,69 |
| SL3315 | - | Hypothetical | 1,27 | 1,27 | 1,19 |
| SL3316 | <i>rpsI</i> | 30S ribosomal protein S9 | -1,09 | 1,04 | -1,76 |
| SL3317 | <i>rplM</i> | 50S ribosomal protein L13 | 1,02 | 1,09 | -1,82 |
| SL3318 | <i>yhcM</i> | Uncharacterized protein yhcM | -1,05 | -1,10 | -2,14 |
| SL3319 | <i>yhcB</i> | Putative cytochrome d ubiquinol oxidase subunit 3 | -1,08 | -1,05 | -1,13 |
| SL3320 | <i>degQ</i> | Protease degQ | -1,00 | -1,03 | 1,32 |
| SL3321 | <i>degS</i> | Protease degS | 1,07 | 1,12 | -1,63 |
| SL3322 | <i>citG1</i> | Probable 2-(5"-triphosphoribosyl)-3'-dephosphocoenzyme-A synthase 1 | 1,39 | 1,09 | 2,38 |
| SL3323 | <i>oadB1</i> | Oxaloacetate decarboxylase beta chain 1 | 1,31 | 1,17 | 1,88 |
| SL3324 | <i>oadA</i> | Oxaloacetate decarboxylase alpha chain | 1,21 | -1,05 | 2,42 |
| SL3325 | <i>oadG2</i> | Oxaloacetate decarboxylase gamma chain 2 | 1,13 | 1,03 | 1,71 |
| SL3326 | <i>ttdB</i> | L(+)-tartrate dehydratase subunit beta | 1,24 | -1,32 | 3,29 |
| SL3327 | <i>ttdA</i> | L(+)-tartrate dehydratase subunit alpha | 1,12 | -1,23 | 4,25 |
| SL3328 | <i>yfbS</i> | Uncharacterized transporter MJ0672 | 1,00 | -1,49 | 3,26 |
| SL3329 | <i>ydfH</i> | GntR Family Transcriptional Regulator | 1,04 | -1,00 | -1,58 |
| SL3330 | <i>pdhR</i> | GntR Family Transcriptional Regulator | -1,09 | -1,03 | -2,07 |
| SL3331 | <i>mdh</i> | Malate dehydrogenase | 1,18 | -1,00 | 4,77 |
| SL3332 | <i>argR</i> | Arginine repressor | 1,14 | 1,17 | 1,30 |
| SL3333 | <i>yhcN</i> | Uncharacterized protein yhcN | 1,33 | 1,28 | -1,85 |
| SL3334 | <i>yhcN</i> | Uncharacterized protein yhcN | 1,29 | 1,14 | 1,12 |
| SL3335 | <i>yhcO</i> | Uncharacterized protein yhcO | 1,30 | 1,51 | 5,06 |
| SL3336 | <i>aaeB</i> | p-hydroxybenzoic acid efflux pump subunit AaeB | 1,15 | 1,02 | -1,34 |
| SL3337 | <i>aaeA</i> | p-hydroxybenzoic acid efflux pump subunit AaeA | 1,08 | -1,01 | -1,10 |
| SL3338 | <i>aaeX</i> | Protein AaeX | 1,10 | 1,09 | -1,09 |
| SL3339 | <i>aaeR</i> | HTH-type transcriptional activator AaeR | -1,02 | -1,07 | 1,38 |
| SL3340 | <i>tldD</i> | Protein tldD | 1,18 | -1,01 | 1,00 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL3341 | <i>yhdP</i> | Uncharacterized protein yhdP | -1,01 | 1,01 | -1,09 |
| SL3342 | <i>rng</i> | Ribonuclease G | -1,02 | -1,07 | -1,18 |
| SL3343 | <i>yceF2</i> | Maf-like protein yceF 2 | 1,02 | -1,03 | -1,43 |
| SL3344 | <i>mreD</i> | Rod shape-determining protein mreD | 1,12 | 1,18 | -1,73 |
| SL3345 | <i>mreC</i> | Rod shape-determining protein mreC | -1,06 | -1,07 | -1,95 |
| SL3346 | <i>mreB</i> | Rod shape-determining protein mreB | -1,11 | 1,01 | -2,43 |
| SL3347 | - | Conserved Hypothetical Protein | -1,08 | 1,03 | -1,96 |
| SL3348 | <i>yhdA</i> | Hypothetical Protein yhdA | -1,15 | 1,08 | -1,75 |
| SL3349 | <i>yhdH</i> | Putative quinone oxidoreductase yhdH | 1,02 | 1,07 | -1,22 |
| SL3350 | <i>yedY</i> | Sulfoxide reductase catalytic subunit yedY | 1,06 | -1,03 | 2,85 |
| SL3351 | <i>yedZ</i> | Sulfoxide reductase heme-binding subunit yedZ | 1,06 | -1,04 | 1,31 |
| SL3352 | <i>accB</i> | Biotin carboxyl carrier protein of acetyl-CoA carboxylase | -1,09 | -1,16 | -1,12 |
| SL3353 | <i>accC</i> | Biotin carboxylase | 1,06 | -1,20 | 1,22 |
| SL3354 | <i>yhdT</i> | Uncharacterized protein yhdT | 1,09 | 1,17 | -2,38 |
| SL3355 | <i>panF</i> | Sodium/pantothenate symporter | -1,04 | 1,01 | -1,53 |
| SL3356 | <i>prmA</i> | Ribosomal protein L11 methyltransferase | 1,00 | -1,14 | -1,03 |
| SL3357 | <i>dusB</i> | tRNA-dihydrouridine synthase B | -1,42 | -1,03 | -3,85 |
| SL3358 | <i>fis</i> | DNA-binding protein fis | -1,24 | -1,03 | -3,28 |
| SL3359 | <i>yhdJ</i> | Uncharacterized adenine-specific methylase yhdJ | -1,16 | -1,02 | -1,96 |
| SL3360 | <i>yhdU</i> | Uncharacterized protein yhdU | 1,12 | 1,23 | 1,74 |
| SL3361 | <i>yciR</i> | Uncharacterized signaling protein PA1727 | 1,28 | 1,10 | 1,25 |
| SL3362 | <i>envR</i> | Probable acrEF/envCD operon repressor | 1,05 | -1,01 | 1,01 |
| SL3363 | <i>acrE</i> | Acriflavine resistance protein E | 1,26 | 1,10 | -2,58 |
| SL3364 | <i>acrF</i> | Acriflavine resistance protein F | 1,36 | 1,06 | -1,32 |
| SL3365 | <i>yhdV</i> | Uncharacterized protein yhdV | -1,10 | 1,10 | -1,29 |
| SL3366 | <i>yrdA</i> | Protein yrdA | -1,05 | -1,08 | 1,35 |
| SL3367 | <i>yrdB</i> | Uncharacterized protein yrdB | 1,14 | -1,05 | -1,02 |
| SL3368 | <i>aroE</i> | Shikimate dehydrogenase | 1,03 | -1,01 | -1,24 |
| SL3369 | <i>rimN</i> | Putative ribosome maturation factor rimN | 1,01 | -1,07 | -1,53 |
| SL3370 | <i>yrdD</i> | Uncharacterized protein yrdD | 1,05 | -1,03 | -1,21 |
| SL3371 | <i>smg</i> | Protein smg | 1,09 | 1,19 | 1,55 |
| SL3372 | <i>smf</i> | Protein smf | 1,11 | 1,06 | 1,60 |
| SL3373 | <i>def</i> | Peptide deformylase | 1,02 | 1,07 | -2,19 |
| SL3374 | <i>fmt</i> | Methionyl-tRNA formyltransferase | -1,06 | -1,16 | -3,52 |
| SL3375 | <i>rsmB</i> | Ribosomal RNA small subunit methyltransferase B | -1,04 | -1,17 | -4,60 |
| SL3376 | <i>trkA</i> | Trk system potassium uptake protein trkA | 1,04 | -1,01 | -2,57 |
| SL3377 | <i>mscL</i> | Large-conductance mechanosensitive channel | 1,05 | 1,26 | 1,93 |
| SL3378 | <i>yhdL</i> | Uncharacterized protein yhdL | -1,03 | 1,16 | -1,02 |
| SL3379 | <i>zntR</i> | HTH-type transcriptional regulator zntR | -1,14 | 1,11 | -1,16 |
| SL3380 | <i>yhdN</i> | Uncharacterized protein yhdN | -1,01 | 1,19 | -1,34 |
| SL3381 | <i>rplQ</i> | 50S ribosomal protein L17 | 1,07 | -1,23 | 1,27 |
| SL3382 | <i>rpoA</i> | DNA-directed RNA polymerase subunit alpha | -1,02 | -1,15 | -1,01 |
| SL3383 | <i>rpsD</i> | 30S ribosomal protein S4 | -1,04 | -1,11 | -1,14 |
| SL3384 | <i>rpsK</i> | 30S ribosomal protein S11 | -1,07 | -1,12 | -1,17 |
| SL3385 | <i>rpsM</i> | 30S ribosomal protein S13 | -1,17 | -1,16 | -1,28 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-----------------------|-----------------------|---------------------------|
| SL3386 | <i>rpmJ1</i> | 50S ribosomal protein L36 1 | -1,03 | -1,09 | -1,21 |
| SL3387 | <i>secY</i> | Preprotein translocase subunit secY | -1,01 | -1,08 | -1,03 |
| SL3388 | <i>rplO</i> | 50S ribosomal protein L15 | 1,06 | 1,08 | 1,18 |
| SL3389 | <i>rpmD</i> | 50S ribosomal protein L30 | 1,04 | 1,07 | 1,19 |
| SL3390 | <i>rpsE</i> | 30S ribosomal protein S5 | 1,08 | 1,09 | 1,06 |
| SL3391 | <i>rplR</i> | 50S ribosomal protein L18 | 1,04 | 1,09 | 1,14 |
| SL3392 | <i>rplF</i> | 50S ribosomal protein L6 | 1,02 | 1,01 | -1,02 |
| SL3393 | <i>rpsH</i> | 30S ribosomal protein S8 | -1,06 | -1,02 | 1,00 |
| SL3394 | <i>rpsN</i> | 30S ribosomal protein S14 | 1,01 | 1,09 | 1,09 |
| SL3395 | <i>rplE</i> | 50S ribosomal protein L5 | -1,08 | -1,01 | -1,06 |
| SL3396 | <i>rplX</i> | 50S ribosomal protein L24 | -1,07 | 1,06 | -1,04 |
| SL3397 | <i>rplN</i> | 50S ribosomal protein L14 | -1,08 | 1,05 | -1,34 |
| SL3398 | <i>rpsQ</i> | 30S ribosomal protein S17 | 1,24 | 1,10 | 1,40 |
| SL3399 | <i>rpmC</i> | 50S ribosomal protein L29 | 1,25 | 1,15 | 1,55 |
| SL3400 | <i>rplP</i> | 50S ribosomal protein L16 | 1,21 | 1,19 | 1,29 |
| SL3401 | <i>rpsC</i> | 30S ribosomal protein S3 | 1,17 | 1,11 | 1,31 |
| SL3402 | <i>rplV</i> | 50S ribosomal protein L22 | 1,19 | 1,12 | 1,18 |
| SL3403 | <i>rpsS</i> | 30S ribosomal protein S19 | 1,16 | 1,10 | 1,10 |
| SL3404 | <i>rplB</i> | 50S ribosomal protein L2 | 1,12 | 1,08 | 1,06 |
| SL3405 | <i>rplW</i> | 50S ribosomal protein L23 | 1,09 | 1,05 | -1,02 |
| SL3406 | <i>rplD</i> | 50S ribosomal protein L4 | 1,07 | 1,06 | -1,13 |
| SL3407 | <i>rplC</i> | 50S ribosomal protein L3 | 1,02 | 1,08 | -1,30 |
| SL3408 | <i>rpsJ</i> | 30S ribosomal protein S10 | -1,00 | 1,16 | -1,67 |
| SL3409 | <i>hopD</i> | Leader peptidase hopD | 1,10 | 1,19 | -1,26 |
| SL3410 | <i>bfr</i> | Bacterioferritin | 1,06 | 1,17 | 1,20 |
| SL3411 | <i>bfd</i> | Bacterioferritin-associated ferredoxin | -1,31 | 1,29 | -4,45 |
| SL3412 | <i>tuf1</i> | Elongation factor Tu 1 | 1,00 | -1,05 | 1,22 |
| SL3413 | <i>fusA</i> | Elongation factor G | 1,06 | 1,02 | 1,08 |
| SL3414 | <i>rpsG</i> | 30S ribosomal protein S7 | -1,04 | 1,05 | -1,20 |
| SL3415 | <i>rpsL</i> | 30S ribosomal protein S12 | -1,19 | -1,02 | -1,43 |
| SL3416 | <i>tusB</i> | Protein tusB | 1,16 | 1,05 | -1,60 |
| SL3417 | <i>tusC</i> | Protein tusC | 1,23 | 1,10 | -1,59 |
| SL3418 | <i>tusD</i> | Sulfurtransferase tusD | 1,10 | -1,03 | -1,96 |
| SL3419 | <i>yheO</i> | Uncharacterized protein yheO | -1,04 | 1,03 | -3,74 |
| SL3420 | <i>fkpA</i> | FKBP-type peptidyl-prolyl cis-trans isomerase fkpA | -1,28 | -1,11 | -2,76 |
| SL3421 | <i>slyX</i> | Protein slyX | 1,15 | 1,18 | -1,44 |
| SL3422 | <i>slyD</i> | FKBP-type peptidyl-prolyl cis-trans isomerase slyD | -1,09 | -1,14 | 1,20 |
| SL3423 | <i>yheV</i> | Uncharacterized protein yheV | 1,00 | 1,04 | 1,36 |
| SL3424 | <i>kefB</i> | Glutathione-regulated potassium-efflux system protein kefB | -1,06 | 1,09 | 1,04 |
| SL3425 | <i>kefG</i> | Glutathione-regulated potassium-efflux system ancillary protein kefG | -1,08 | 1,31 | 1,23 |
| SL3426 | <i>yheS</i> | Uncharacterized ABC transporter ATP-binding protein yheS | -1,06 | -1,12 | -1,43 |
| SL3427 | - | ABC Transporter ATPase | 1,05 | 1,01 | 2,68 |
| SL3428 | <i>ydhR</i> | Putative monooxygenase ydhR | 1,17 | 1,08 | 2,59 |
| SL3429 | <i>yheT</i> | Putative esterase yheT | -1,03 | -1,18 | -1,19 |
| SL3430 | <i>yheU</i> | UPF0270 protein yheU | 1,15 | 1,10 | -1,10 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL3431 | <i>prkB</i> | Probable phosphoribulokinase | 1,06 | -1,03 | 1,07 |
| SL3432 | <i>yhfA</i> | Protein yhfA | 1,21 | 1,18 | -1,19 |
| SL3433 | <i>crp</i> | Catabolite gene activator | -1,04 | -1,17 | 1,36 |
| SL3434 | <i>yhfK</i> | Uncharacterized protein yhfK | 1,20 | 1,03 | 1,21 |
| SL3435 | <i>argD</i> | Acetylornithine/succinylidiaminopimelate aminotransferase | 1,04 | -1,02 | -1,17 |
| SL3436 | <i>pabA</i> | Para-aminobenzoate synthase glutamine amidotransferase component II | 1,04 | 1,06 | -1,29 |
| SL3437 | <i>fic</i> | Probable adenosine monophosphate-protein transferase fic | 1,20 | 1,17 | 2,17 |
| SL3438 | <i>yhfG</i> | Uncharacterized protein yhfG | 1,03 | 1,16 | 1,79 |
| SL3439 | <i>ppiA</i> | Peptidyl-prolyl cis-trans isomerase A | 1,14 | 1,03 | -1,43 |
| SL3440 | <i>tsgA</i> | Protein tsgA | -1,26 | 1,12 | -2,99 |
| SL3441 | <i>nirB</i> | Nitrite reductase [NAD(P)H] large subunit | -1,07 | 1,83 | -3,09 |
| SL3442 | <i>nirD</i> | Nitrite reductase [NAD(P)H] small subunit | 1,11 | 1,18 | -6,95 |
| SL3443 | <i>nirC</i> | Probable nitrite transporter | 1,18 | 1,04 | -5,91 |
| SL3444 | <i>cysG</i> | Siroheme synthase | 1,23 | 1,22 | -1,43 |
| SL3445 | <i>bigA</i> | Putative surface-exposed virulence protein BigA | -1,05 | 1,21 | -1,05 |
| SL3447 | <i>yhfL</i> | Uncharacterized protein yhfL | 1,04 | -1,07 | 1,08 |
| SL3448 | <i>trpS</i> | Tryptophanyl-tRNA synthetase | -1,00 | -1,19 | 1,24 |
| SL3449 | <i>gph</i> | Phosphoglycolate phosphatase | 1,04 | -1,27 | 1,41 |
| SL3450 | <i>rpe</i> | Ribulose-phosphate 3-epimerase | 1,20 | -1,03 | 1,73 |
| SL3451 | <i>dam</i> | DNA adenine methylase | 1,08 | 1,02 | -1,44 |
| SL3452 | <i>damX</i> | Protein damX | 1,02 | -1,01 | -1,07 |
| SL3453 | <i>aroB</i> | 3-dehydroquinate synthase | 1,04 | 1,00 | -1,47 |
| SL3454 | <i>aroK</i> | Shikimate kinase 1 | -1,05 | 1,01 | -1,65 |
| SL3455 | <i>hofQ</i> | Protein transport protein hofQ | 1,04 | -1,06 | 1,25 |
| SL3456 | <i>yrfA</i> | Uncharacterized protein yrfA | -1,06 | 1,19 | 2,46 |
| SL3457 | <i>yrfB</i> | Uncharacterized protein yrfB | -1,09 | -1,15 | 1,22 |
| SL3458 | <i>yrfC</i> | Uncharacterized protein yrfC | -1,00 | -1,17 | 1,82 |
| SL3459 | <i>yrfD</i> | Uncharacterized protein yrfD | 1,07 | -1,11 | 1,24 |
| SL3460 | <i>mrcA</i> | Penicillin-binding protein 1A | -1,02 | 1,05 | 1,15 |
| SL3461 | <i>nudE</i> | ADP compounds hydrolase nudE | 1,26 | 1,16 | -1,44 |
| SL3462 | <i>yrfF</i> | Putative membrane protein igaA homolog | 1,02 | 1,06 | -1,63 |
| SL3463 | <i>yrfG</i> | Uncharacterized protein yrfG | 1,03 | 1,02 | -1,35 |
| SL3464 | <i>hslR</i> | Heat shock protein 15 | 1,09 | 1,09 | 1,06 |
| SL3465 | <i>hslO</i> | 33 kDa chaperonin | 1,19 | -1,00 | 1,18 |
| SL3466 | <i>yhgE</i> | Uncharacterized protein yhgE | 1,01 | -1,01 | -1,16 |
| SL3467 | <i>pckA</i> | Phosphoenolpyruvate carboxykinase [ATP] | 1,09 | 1,02 | 1,83 |
| SL3468 | <i>envZ</i> | Osmolarity sensor protein envZ | -1,07 | -1,61 | -2,23 |
| SL3469 | <i>ompR</i> | Transcriptional regulatory protein ompR | -1,01 | -1,61 | -1,66 |
| SL3470 | <i>greB</i> | Transcription elongation factor greB | 1,06 | -22,80 | -59,94 |
| SL3471 | <i>yhgF</i> | Protein yhgF | -1,23 | 2,01 | -1,52 |
| SL3472 | <i>feoA</i> | Ferrous iron transport protein A | -1,03 | 1,53 | -3,17 |
| SL3473 | <i>feoB</i> | Ferrous iron transport protein B | -1,06 | 1,43 | -3,20 |
| SL3474 | <i>feoC</i> | Ferrous iron transport protein C | -1,20 | 1,24 | -2,73 |
| SL3475 | <i>yfcl</i> | Uncharacterized protein yfcl | 1,11 | 1,08 | 1,36 |
| SL3476 | <i>bioH</i> | Carboxylesterase BioH | 1,06 | -1,05 | 1,02 |
| SL3477 | <i>gntX</i> | Protein gntX | -1,06 | -1,35 | 1,60 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-----------------------|-----------------------|---------------------------|
| SL3478 | <i>nfuA</i> | Fe/S biogenesis protein nfuA | -1,09 | 1,10 | 1,58 |
| SL3479 | <i>gntT</i> | High-affinity gluconate transporter | 1,06 | -1,22 | 2,22 |
| SL3480 | <i>malQ</i> | 4-alpha-glucanotransferase | 1,13 | -1,11 | -1,38 |
| SL3481 | <i>malP</i> | Maltodextrin phosphorylase | -1,20 | -1,30 | -1,12 |
| SL3482 | <i>malT</i> | HTH-type transcriptional regulator malT | 1,22 | 1,26 | 5,14 |
| SL3483 | <i>yafQ</i> | Uncharacterized protein yafQ | 1,27 | 1,24 | 1,97 |
| SL3484 | <i>dinJ</i> | DNA-damage-inducible protein J | 1,04 | 1,37 | 2,15 |
| SL3485 | <i>rtcA</i> | Probable RNA 3'-terminal phosphate cyclase | -1,07 | 1,48 | 1,57 |
| SL3486 | <i>rtcB</i> | Protein rtcB | -1,08 | 1,43 | 1,15 |
| SL3487 | <i>rsr</i> | 60 kDa SS-A/Ro ribonucleoprotein homolog | -1,06 | 1,27 | -1,48 |
| SL3488 | <i>rtcR</i> | Transcriptional regulatory protein rtcR | 1,22 | 1,02 | 1,33 |
| SL3489 | <i>glpR</i> | Glycerol-3-phosphate regulon repressor | 1,24 | 1,06 | -1,34 |
| SL3490 | <i>glpR</i> | Glycerol-3-phosphate regulon repressor | -1,04 | -1,18 | -1,84 |
| SL3491 | <i>glpG</i> | Rhomboid protease glpG | -1,03 | -1,07 | -2,04 |
| SL3492 | <i>glpE</i> | Thiosulfate sulfurtransferase glpE | -1,16 | -1,10 | -1,50 |
| SL3493 | <i>glpD</i> | Aerobic glycerol-3-phosphate dehydrogenase | -1,04 | 1,03 | -1,26 |
| SL3494 | <i>ybbD</i> | Hypothetical | 1,14 | -1,06 | -1,01 |
| SL3495 | <i>pstS1</i> | Phosphate-binding protein pstS 1 | 1,13 | 1,12 | 1,20 |
| SL3496 | <i>gldA</i> | Glycerol dehydrogenase | 1,11 | 1,21 | 1,77 |
| SL3497 | <i>ttuB</i> | Putative tartrate transporter | 1,09 | 1,05 | 2,60 |
| SL3498 | <i>ilvD</i> | Dihydroxy-acid dehydratase | 1,02 | 1,08 | 3,10 |
| SL3499 | <i>yjhH</i> | Uncharacterized protein yjhH | 1,14 | 1,00 | 1,97 |
| SL3500 | <i>yfaX</i> | Uncharacterized HTH-type transcriptional regulator yfaX | 1,21 | 1,01 | 1,63 |
| SL3501 | <i>glgP</i> | Glycogen phosphorylase | 1,13 | 1,02 | 1,04 |
| SL3502 | <i>glgA</i> | Glycogen synthase | 1,17 | 1,09 | 1,32 |
| SL3503 | <i>glgC</i> | Glucose-1-phosphate adenylyltransferase | 1,25 | 1,15 | 2,20 |
| SL3504 | <i>glgX</i> | Glycogen debranching enzyme | 1,17 | -1,13 | 2,04 |
| SL3505 | <i>glgB</i> | 1,4-alpha-glucan-branching enzyme | 1,20 | -1,03 | 2,35 |
| SL3506 | <i>asd</i> | Aspartate-semialdehyde dehydrogenase | 1,08 | -1,30 | 1,45 |
| SL3507 | <i>gntU</i> | Low-affinity gluconate transporter | 1,00 | 1,03 | -1,61 |
| SL3508 | <i>gntK</i> | Thermoresistant gluconokinase | 1,02 | -1,24 | -1,84 |
| SL3509 | <i>gntR</i> | HTH-type transcriptional regulator gntR | 1,10 | 1,13 | -1,14 |
| SL3510 | <i>yhhW</i> | Protein yhhW | 1,23 | 1,22 | 1,35 |
| SL3511 | <i>yhhX</i> | Uncharacterized oxidoreductase yhhX | 1,20 | 1,01 | 1,09 |
| SL3512 | <i>yhhY</i> | Uncharacterized N-acetyltransferase yhhY | -1,08 | -1,11 | -1,09 |
| SL3513 | <i>rbsK</i> | Ribokinase | -1,18 | 1,03 | -2,44 |
| SL3514 | - | Hypothetical | -1,08 | 1,27 | -3,60 |
| SL3515 | - | Hypothetical | -1,08 | -1,01 | -2,67 |
| SL3516 | <i>php</i> | Phosphotriesterase homology protein | 1,01 | -1,07 | -2,76 |
| SL3517 | <i>ggt</i> | Gamma-glutamyltranspeptidase | 1,08 | 1,06 | 1,29 |
| SL3518 | <i>yhhA</i> | Uncharacterized protein yhhA | 1,13 | 1,56 | 2,39 |
| SL3519 | <i>ugpQ</i> | Glycerophosphoryl diester phosphodiesterase | 1,18 | 1,30 | 2,41 |
| SL3520 | <i>ugpC</i> | sn-glycerol-3-phosphate import ATP-binding protein UgpC | 1,20 | -1,48 | 4,06 |
| SL3521 | <i>ugpE</i> | sn-glycerol-3-phosphate transport system permease protein ugpE | 1,12 | -1,72 | 3,15 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-------------------|-------------------|-----------------------|
| SL3522 | <i>ugpA</i> | sn-glycerol-3-phosphate transport system permease protein ugpA | 1,32 | -1,43 | 3,48 |
| SL3523 | <i>ugpB</i> | sn-glycerol-3-phosphate-binding periplasmic protein ugpB | 1,27 | 1,10 | 12,09 |
| SL3524 | - | Death On Curing Protein | 1,38 | 1,12 | 4,53 |
| SL3525 | <i>yhhV</i> | Uncharacterized protein yhhV | 1,35 | 1,25 | 4,30 |
| SL3526 | <i>livF</i> | High-affinity branched-chain amino acid transport ATP-binding protein livF | -1,11 | -1,23 | 1,18 |
| SL3527 | <i>livG</i> | High-affinity branched-chain amino acid transport ATP-binding protein livG | 1,15 | -1,02 | 1,46 |
| SL3528 | <i>livM</i> | High-affinity branched-chain amino acid transport system permease protein livM | 1,17 | 1,10 | 1,34 |
| SL3529 | <i>livH</i> | High-affinity branched-chain amino acid transport system permease protein livH | 1,05 | 1,02 | 1,40 |
| SL3530 | <i>livK</i> | Leucine-specific-binding protein | 1,17 | -1,03 | 1,58 |
| SL3531 | <i>yhhK</i> | Uncharacterized protein yhhK | 1,08 | 1,20 | -1,11 |
| SL3532 | <i>livJ</i> | Leu/Ile/Val-binding protein | -1,06 | 1,01 | 2,72 |
| SL3533 | <i>rpoH</i> | RNA polymerase sigma-32 factor | 1,09 | 1,05 | -1,16 |
| SL3534 | <i>ftsX</i> | Cell division protein ftsX | 1,16 | 1,03 | -1,17 |
| SL3535 | <i>ftsE</i> | Cell division ATP-binding protein ftsE | -1,01 | -1,06 | -1,65 |
| SL3536 | <i>ftsY</i> | Cell division protein ftsY | 1,05 | 1,09 | -2,07 |
| SL3537 | <i>rsmD</i> | Ribosomal RNA small subunit methyltransferase D | 1,15 | -1,06 | -1,13 |
| SL3538 | <i>yhhL</i> | Uncharacterized protein yhhL | 1,03 | -1,05 | 1,06 |
| SL3539 | <i>yhhM</i> | Uncharacterized protein yhhM | -1,03 | -1,10 | 1,03 |
| SL3540 | <i>yhhN</i> | Uncharacterized membrane protein yhhN | 1,19 | 1,35 | -1,05 |
| SL3541 | <i>zntA</i> | Lead, cadmium, zinc and mercury-transporting ATPase | -1,06 | 1,04 | 3,05 |
| SL3542 | <i>tcp</i> | Methyl-accepting chemotaxis citrate transducer | 1,12 | 1,11 | -2,21 |
| SL3543 | <i>tusA</i> | Sulfurtransferase tusA | -1,02 | -1,15 | -11,47 |
| SL3544 | <i>yhhQ</i> | Inner membrane protein yhhQ | -1,29 | 1,01 | -4,91 |
| SL3545 | <i>dcrB</i> | Protein dcrB | 1,06 | 1,12 | 1,00 |
| SL3546 | <i>yhhS</i> | UPF0226 membrane protein SEN3404 | 1,78 | 1,40 | 1,31 |
| SL3547 | <i>yhhT</i> | UPF0118 inner membrane protein yhhT | -1,01 | 1,00 | 1,20 |
| SL3548 | <i>acpT</i> | 4'-phosphopantetheinyl transferase AcpT | 1,09 | 1,04 | -1,20 |
| SL3549 | <i>nikR</i> | Nickel-responsive regulator | 1,05 | -1,15 | -1,22 |
| SL3550 | <i>yhhJ</i> | Inner membrane transport permease yhhJ | 1,11 | 1,06 | 1,42 |
| SL3551 | <i>yhiH</i> | Uncharacterized ABC transporter ATP-binding protein yhiH | 1,05 | 1,06 | 1,02 |
| SL3552 | <i>yhil</i> | Uncharacterized protein yhil | 1,18 | 1,31 | 2,20 |
| SL3553 | <i>yhiN</i> | Uncharacterized protein yhiN | 1,13 | 1,13 | -1,15 |
| SL3554 | <i>pitA</i> | Low-affinity inorganic phosphate transporter 1 | -1,11 | 1,02 | -1,94 |
| SL3555 | <i>uspB</i> | Universal stress protein B | 1,18 | 1,24 | 2,84 |
| SL3556 | <i>uspA</i> | Universal stress protein A | 1,17 | 1,22 | 1,87 |
| SL3557 | <i>dtpB</i> | Dipeptide and tripeptide permease B | 1,53 | 1,11 | 3,02 |
| SL3558 | <i>yhiQ</i> | UPF0341 protein yhiQ | 1,16 | -1,23 | -1,20 |
| SL3559 | <i>prlC</i> | Oligopeptidase A | 1,01 | -1,10 | -2,03 |
| SL3560 | <i>phoC</i> | Major phosphate-irrepressible acid phosphatase | -1,39 | 1,43 | -1,61 |
| SL3561 | <i>yhiR</i> | Uncharacterized protein yhiR | 1,04 | 1,01 | -2,11 |
| SL3562 | <i>gor</i> | Glutathione reductase | 1,06 | -1,03 | -1,25 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL3563 | <i>ansB</i> | L-asparaginase | 1,21 | -1,48 | 32,54 |
| SL3564 | <i>dcuB</i> | Anaerobic C4-dicarboxylate transporter <i>dcuB</i> | 1,27 | -1,59 | 55,06 |
| SL3565 | <i>frlD</i> | Fructosamine kinase <i>frlD</i> | -1,09 | -1,71 | 33,42 |
| SL3566 | <i>frlB</i> | Fructosamine deglycase <i>frlB</i> | 1,36 | -1,39 | 33,98 |
| SL3567 | <i>yvoA</i> | HTH-type transcriptional repressor <i>yvoA</i> | -1,22 | 1,02 | 1,81 |
| SL3568 | <i>treF</i> | Cytoplasmic trehalase | -1,04 | 1,07 | -1,18 |
| SL3569 | - | Hypothetical | 1,19 | 1,25 | 3,95 |
| SL3570 | - | Conserved Hypothetical Protein | -1,27 | 1,16 | -1,38 |
| SL3571 | <i>yhjB</i> | Putative HTH-type transcriptional regulator <i>yhjB</i> | -1,50 | 1,26 | -3,03 |
| SL3572 | <i>yhjC</i> | Uncharacterized HTH-type transcriptional regulator <i>yhjC</i> | 1,07 | -1,06 | 2,24 |
| SL3573 | <i>yhjD</i> | Inner membrane protein <i>yhjD</i> | -1,04 | -1,11 | 1,18 |
| SL3574 | <i>yhjE</i> | Inner membrane metabolite transport protein <i>yhjE</i> | 1,03 | -1,05 | 1,26 |
| SL3575 | <i>yhjG</i> | Uncharacterized protein <i>yhjG</i> | 1,15 | 1,14 | 1,60 |
| SL3576 | <i>yhjH</i> | Cyclic di-GMP phosphodiesterase <i>YhjH</i> | -1,44 | 1,20 | -5,37 |
| SL3577 | <i>kdgK</i> | 2-dehydro-3-deoxygluconokinase | 1,12 | -1,08 | 4,32 |
| SL3578 | <i>yhjJ</i> | Protein <i>yhjJ</i> | -1,09 | -1,03 | -1,58 |
| SL3579 | <i>dctA</i> | C4-dicarboxylate transport protein | -1,06 | -1,17 | 14,63 |
| SL3580 | <i>yhjK</i> | Protein <i>YhjK</i> | 1,24 | 1,26 | -1,14 |
| SL3581 | <i>bcsC</i> | Cellulose synthase operon protein C | 1,05 | 1,15 | 1,52 |
| SL3582 | <i>bcsZ</i> | Endoglucanase | 1,04 | -1,05 | 1,26 |
| SL3583 | <i>bcsB</i> | Cyclic di-GMP-binding protein | 1,05 | 1,03 | 1,43 |
| SL3584 | <i>bcsA</i> | Cellulose synthase catalytic subunit [UDP-forming] | 1,03 | -1,05 | -1,13 |
| SL3585 | <i>yhjQ</i> | Uncharacterized protein <i>yhjQ</i> | -1,10 | 1,03 | 1,17 |
| SL3586 | <i>yhjR</i> | Uncharacterized protein <i>yhjR</i> | -1,14 | 1,05 | 1,44 |
| SL3587 | <i>yhjS</i> | Uncharacterized protein <i>yhjS</i> | 1,06 | 1,02 | -1,15 |
| SL3588 | <i>yhjT</i> | Uncharacterized protein <i>yhjT</i> | 1,15 | 1,07 | 1,02 |
| SL3589 | <i>yhjU</i> | Uncharacterized protein <i>yhjU</i> | 1,12 | -1,07 | -1,15 |
| SL3590 | - | Hypothetical Protein SL3590 | 1,75 | 1,19 | -1,82 |
| SL3591 | <i>yhjV</i> | Inner membrane transport protein <i>yhjV</i> | -1,12 | 1,08 | -1,37 |
| SL3592 | <i>dppF</i> | Dipeptide transport ATP-binding protein <i>dppF</i> | 1,36 | -1,21 | 1,31 |
| SL3593 | <i>dppD</i> | Dipeptide transport ATP-binding protein <i>dppD</i> | 1,21 | -1,35 | 1,11 |
| SL3594 | <i>dppC</i> | Dipeptide transport system permease protein <i>dppC</i> | 1,01 | -1,55 | -1,14 |
| SL3595 | <i>dppB</i> | Dipeptide transport system permease protein <i>dppB</i> | -1,01 | -1,46 | -1,12 |
| SL3596 | <i>dppA</i> | Periplasmic dipeptide transport protein | 1,12 | 1,02 | 3,36 |
| SL3597 | <i>pucK</i> | Uric acid permease <i>pucK</i> | -1,06 | -1,03 | 1,16 |
| SL3598 | - | Hypothetical | -1,38 | -1,04 | -2,34 |
| SL3599 | <i>celR</i> | HTH-type transcriptional regulator <i>celR</i> | -1,08 | -1,03 | -1,87 |
| SL3600 | <i>eptB</i> | Phosphoethanolamine transferase <i>eptB</i> | 1,22 | -1,11 | -1,14 |
| SL3601 | <i>lpfE</i> | Protein <i>lpfE</i> | 1,05 | 1,02 | -1,41 |
| SL3602 | <i>lpfD</i> | Protein <i>lpfD</i> | 1,02 | 1,13 | -1,49 |
| SL3603 | <i>lpfD</i> | Protein <i>lpfD</i> | 1,20 | 1,19 | -1,39 |
| SL3604 | <i>lpfC</i> | Outer membrane usher protein <i>lpfC</i> | 1,04 | 1,00 | -1,06 |
| SL3605 | <i>lpfB</i> | Chaperone protein <i>lpfB</i> | -1,23 | -1,01 | -1,51 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL3606 | <i>lpfA</i> | Long polar fimbria protein A | -1,01 | 1,01 | 1,37 |
| SL3607 | <i>yhjY</i> | Uncharacterized protein <i>yhjY</i> | 1,40 | 1,22 | 1,62 |
| SL3608 | <i>tag</i> | DNA-3-methyladenine glycosylase 1 | 1,17 | -1,05 | 2,24 |
| SL3609 | <i>yiaC</i> | Uncharacterized N-acetyltransferase <i>yiaC</i> | 1,15 | -1,16 | 2,67 |
| SL3610 | <i>bisC</i> | Biotin sulfoxide reductase | 1,13 | -1,03 | 1,22 |
| SL3611 | <i>yiaD</i> | Inner membrane lipoprotein <i>yiaD</i> | 1,04 | 1,14 | -1,05 |
| SL3612 | <i>ghrB</i> | Glyoxylate/hydroxypyruvate reductase B | 1,26 | 1,11 | 2,04 |
| SL3613 | <i>yiaF</i> | Uncharacterized protein <i>yiaF</i> | 1,03 | -1,02 | 1,25 |
| SL3614 | <i>yiaG</i> | Uncharacterized HTH-type transcriptional regulator <i>yiaG</i> | -1,01 | -1,08 | 1,04 |
| SL3615 | <i>cspA</i> | Cold shock protein <i>cspA</i> | -1,20 | -1,57 | -2,91 |
| SL3616 | - | Hypothetical | -1,20 | -1,12 | -1,35 |
| SL3617 | - | GCN5-Related N-Acetyltransferase | -1,10 | -1,24 | -1,11 |
| SL3618 | - | Hypothetical | -1,06 | -1,29 | 1,08 |
| SL3619 | <i>yafP</i> | Uncharacterized N-acetyltransferase <i>yafP</i> | -1,56 | -1,18 | -1,27 |
| SL3620 | <i>glyS</i> | Glycyl-tRNA synthetase beta subunit | 1,12 | -1,22 | 1,44 |
| SL3621 | <i>glyQ</i> | Glycyl-tRNA synthetase alpha subunit | 1,05 | 1,04 | -1,06 |
| SL3622 | <i>ysaB</i> | Uncharacterized lipoprotein <i>ysaB</i> | 1,13 | 1,04 | 1,05 |
| SL3623 | <i>yiaH</i> | Inner membrane protein <i>yiaH</i> | -1,03 | 1,20 | -1,18 |
| SL3624 | <i>yiaB</i> | Hypothetical | 1,14 | 1,35 | -1,30 |
| SL3625 | <i>xylB</i> | Xylulose kinase | 1,11 | 1,10 | 2,26 |
| SL3626 | <i>xylA</i> | Xylose isomerase | -1,06 | -1,04 | 2,26 |
| SL3627 | <i>xylR</i> | Xylose operon regulatory protein | -1,07 | -1,01 | 1,05 |
| SL3628 | <i>bax</i> | Protein <i>bax</i> | -1,39 | 1,03 | -9,21 |
| SL3629 | <i>malS</i> | Alpha-amylase | -1,19 | -1,41 | -1,72 |
| SL3630 | <i>avtA</i> | Valine--pyruvate aminotransferase | 1,04 | 1,23 | -1,04 |
| SL3631 | <i>ysaA</i> | Putative electron transport protein <i>ysaA</i> | 1,28 | 1,09 | 1,85 |
| SL3632 | <i>yiaJ</i> | HTH-type transcriptional regulator <i>yiaJ</i> | 1,17 | -1,09 | 1,12 |
| SL3633 | <i>dkgD</i> | 2,3-diketo-L-gulonate reductase | 1,01 | -1,07 | 4,51 |
| SL3634 | <i>yiaL</i> | Protein <i>yiaL</i> | 1,49 | 1,24 | 1,71 |
| SL3635 | - | Hypothetical | 1,09 | 1,12 | 2,38 |
| SL3636 | <i>yiaM</i> | 2,3-diketo-L-gulonate TRAP transporter small permease protein <i>yiaM</i> | -1,20 | -1,30 | 1,42 |
| SL3637 | <i>yiaN</i> | 2,3-diketo-L-gulonate TRAP transporter large permease protein <i>yiaN</i> | -1,05 | -1,38 | 2,40 |
| SL3638 | <i>yiaO</i> | 2,3-diketo-L-gulonate-binding periplasmic protein <i>yiaO</i> | 1,36 | 1,16 | 4,21 |
| SL3639 | <i>lyx</i> | L-xylulose/3-keto-L-gulonate kinase | 1,14 | 1,11 | 2,70 |
| SL3640 | <i>sgbH</i> | 3-keto-L-gulonate-6-phosphate decarboxylase <i>sgbH</i> | 1,01 | 1,11 | 1,51 |
| SL3641 | <i>sgbU</i> | Putative L-ribulose-5-phosphate 3-epimerase <i>sgbU</i> | 1,45 | 1,69 | 3,77 |
| SL3642 | <i>sgbE</i> | L-ribulose-5-phosphate 4-epimerase <i>sgbE</i> | 1,07 | 1,33 | 1,93 |
| SL3643 | <i>yisR</i> | Uncharacterized HTH-type transcriptional regulator <i>yisR</i> | 1,24 | -1,19 | 4,41 |
| SL3644 | - | Hypothetical | 1,18 | -1,02 | 4,20 |
| SL3645 | <i>aldB</i> | Aldehyde dehydrogenase B | 1,01 | 1,23 | 2,38 |
| SL3646 | <i>yajF</i> | Uncharacterized protein CPE0188 | 1,16 | -1,04 | 1,47 |
| SL3647 | <i>selB</i> | Selenocysteine-specific elongation factor | -1,02 | -1,04 | 1,24 |
| SL3648 | <i>selA</i> | L-seryl-tRNA(Sec) selenium transferase | 1,30 | 1,25 | 1,52 |
| SL3649 | <i>yibF</i> | Uncharacterized GST-like protein <i>yibF</i> | 1,10 | 1,09 | 2,65 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-------------------|-------------------|-----------------------|
| SL3650 | <i>mtlA</i> | PTS system mannitol-specific EIICBA component | 1,02 | -1,03 | 3,05 |
| SL3651 | <i>mtlD</i> | Mannitol-1-phosphate 5-dehydrogenase | 1,16 | 1,20 | 1,95 |
| SL3652 | <i>mtlR</i> | Mannitol operon repressor | 1,20 | 1,06 | 1,57 |
| SL3653 | <i>yibT</i> | Uncharacterized protein yibT | 1,13 | 1,35 | 5,71 |
| SL3654 | <i>yibL</i> | Uncharacterized protein yibL | 1,24 | 1,27 | 1,29 |
| SL3655 | - | Hypothetical | -1,00 | 1,02 | 1,20 |
| SL3656 | <i>yadA</i> | Adhesin yadA | 1,10 | 1,17 | 1,97 |
| SL3657 | <i>lldP</i> | L-lactate permease | -1,29 | -1,01 | 1,85 |
| SL3658 | <i>lldR</i> | Putative L-lactate dehydrogenase operon regulatory protein | -1,51 | -1,00 | 2,62 |
| SL3659 | <i>lldD</i> | L-lactate dehydrogenase [cytochrome] | -1,46 | -1,28 | 3,49 |
| SL3660 | <i>yibK</i> | Uncharacterized tRNA/rRNA methyltransferase yibK | 1,16 | -1,13 | -1,22 |
| SL3661 | <i>idnR</i> | HTH-type transcriptional regulator idnR | -1,07 | 1,06 | -1,58 |
| SL3662 | <i>mdlA</i> | Mandelate racemase | 1,18 | 1,01 | 4,34 |
| SL3663 | <i>gudP</i> | Probable glucarate transporter | 1,43 | 1,22 | 4,44 |
| SL3664 | - | MFS Transporter ACS Family Glucarate Transporter | 1,26 | 1,18 | 1,32 |
| SL3665 | <i>cysE</i> | Serine acetyltransferase | 1,17 | -1,08 | 1,18 |
| SL3666 | <i>gpsA</i> | Glycerol-3-phosphate dehydrogenase [NAD(P)+] | 1,10 | -1,12 | 1,76 |
| SL3667 | <i>secB</i> | Protein-export protein secB | 1,01 | -1,10 | 1,68 |
| SL3668 | <i>grxC</i> | Glutaredoxin-3 | 1,17 | 1,04 | 1,35 |
| SL3669 | <i>yibN</i> | Uncharacterized protein yibN | 1,01 | 1,01 | 1,35 |
| SL3670 | <i>gpmI</i> | 2,3-bisphosphoglycerate-independent phosphoglycerate mutase | -1,03 | 1,15 | -3,23 |
| SL3671 | <i>yibP</i> | Uncharacterized protein yibP | -1,07 | -1,17 | -2,15 |
| SL3672 | <i>yibQ</i> | Uncharacterized protein yibQ | 1,06 | -1,12 | -1,51 |
| SL3673 | <i>yibD</i> | Uncharacterized glycosyltransferase yibD | 1,21 | 1,20 | -1,75 |
| SL3674 | <i>tdh</i> | L-threonine 3-dehydrogenase | 1,25 | -1,10 | 3,79 |
| SL3675 | <i>kbl</i> | Putative 8-amino-7-oxononanoate synthase/2-amino-3-ketobutyrate coenzyme A ligase | 1,06 | -1,25 | 2,94 |
| SL3676 | <i>hldD</i> | ADP-L-glycero-D-manno-heptose-6-epimerase | 1,23 | 1,05 | 1,15 |
| SL3677 | <i>rfaF</i> | ADP-heptose--LPS heptosyltransferase 2 | 1,22 | -1,06 | -1,25 |
| SL3678 | <i>rfaC</i> | Lipopolysaccharide heptosyltransferase 1 | 1,03 | -1,22 | -1,52 |
| SL3679 | <i>rfaL</i> | O-antigen ligase | 1,05 | -1,12 | -1,69 |
| SL3680 | <i>waaK</i> | Lipopolysaccharide 1,2-N-acetylglucosaminetransferase | -1,13 | -1,02 | -1,32 |
| SL3681 | <i>rfaZ</i> | Lipopolysaccharide core biosynthesis protein rfaZ | -1,08 | 1,02 | -1,55 |
| SL3682 | <i>rfaY</i> | Lipopolysaccharide core heptose(II) kinase rfaY | -1,19 | -1,21 | -1,46 |
| SL3683 | <i>rfaJ</i> | Lipopolysaccharide 1,2-glucosyltransferase | -1,13 | 1,05 | 1,04 |
| SL3684 | <i>rfaI</i> | Lipopolysaccharide 1,3-galactosyltransferase | -1,29 | -1,02 | -1,23 |
| SL3685 | <i>rfaB</i> | Lipopolysaccharide 1,6-galactosyltransferase | -1,13 | 1,07 | -1,41 |
| SL3686 | <i>yibR</i> | Uncharacterized protein yibR | 1,03 | 1,09 | -1,10 |
| SL3687 | <i>rfaP</i> | Lipopolysaccharide core heptose(I) kinase rfaP | -1,00 | 1,01 | -1,17 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-------------------|-------------------|-----------------------|
| SL3688 | <i>rfaG</i> | Lipopolysaccharide core biosynthesis protein rfaG | -1,03 | 1,06 | -1,58 |
| SL3689 | <i>rfaQ</i> | Lipopolysaccharide core heptosyltransferase rfaQ | -1,02 | -1,01 | -2,00 |
| SL3690 | <i>waaA</i> | 3-deoxy-D-manno-octulosonic-acid transferase | -1,02 | -1,06 | -1,20 |
| SL3691 | <i>coaD</i> | Phosphopantetheine adenyllyltransferase | -1,07 | -1,08 | -1,13 |
| SL3692 | <i>mutM</i> | Formamidopyrimidine-DNA glycosylase | 1,10 | -1,13 | 1,30 |
| SL3693 | <i>rpmG</i> | 50S ribosomal protein L33 | -1,22 | -1,15 | -1,66 |
| SL3694 | <i>rpmB</i> | 50S ribosomal protein L28 | -1,17 | -1,08 | -1,52 |
| SL3695 | <i>yicR</i> | UPF0758 protein yicR | -1,04 | 1,06 | 3,41 |
| SL3696 | <i>coaBC</i> | Coenzyme A biosynthesis bifunctional protein coaBC | 1,06 | 1,03 | -1,43 |
| SL3697 | <i>dut</i> | Deoxyuridine 5'-triphosphate nucleotidohydrolase | 1,04 | -1,17 | -1,22 |
| SL3698 | <i>sImA</i> | HTH-type protein sImA | 1,06 | -1,18 | -1,22 |
| SL3699 | <i>pyrE</i> | Orotate phosphoribosyltransferase | 1,22 | -1,17 | 1,04 |
| SL3700 | <i>rph</i> | Ribonuclease PH | 1,16 | 1,06 | -2,20 |
| SL3701 | <i>yicC</i> | UPF0701 protein yicC | -1,05 | -1,02 | -1,31 |
| SL3702 | <i>ybeF</i> | LysR Family Transcriptional Regulator | 1,15 | 1,10 | 1,01 |
| SL3703 | <i>ycbL</i> | Metallo-beta-lactamase L1 | 1,29 | -1,10 | 2,03 |
| SL3704 | <i>yicG</i> | UPF0126 inner membrane protein yicG | 1,20 | 1,15 | -3,47 |
| SL3705 | <i>ligB</i> | DNA ligase B | 1,16 | -1,05 | 1,50 |
| SL3706 | <i>gmk</i> | Guanylate kinase | 1,02 | -1,02 | -1,31 |
| SL3707 | <i>rpoZ</i> | DNA-directed RNA polymerase subunit omega | 1,02 | 1,01 | -1,17 |
| SL3708 | <i>spoT</i> | Guanosine-3',5'-bis(diphosphate) 3'-pyrophosphohydrolase | 1,01 | -1,03 | -1,35 |
| SL3709 | <i>trmH</i> | tRNA guanosine-2'-O-methyltransferase | 1,33 | 1,12 | -1,01 |
| SL3710 | <i>recG</i> | ATP-dependent DNA helicase recG | 1,16 | 1,01 | 1,07 |
| SL3711 | - | Cytoplasmic Protein | 1,50 | -1,09 | 5,37 |
| SL3712 | <i>gltS</i> | Sodium/glutamate symport carrier protein | 1,44 | 1,03 | 5,98 |
| SL3713 | <i>xanP</i> | Xanthine permease XanP | 1,26 | 1,27 | 1,11 |
| SL3714 | <i>yicH</i> | Uncharacterized protein yicH | 1,11 | -1,08 | 2,92 |
| SL3715 | <i>yicl</i> | Alpha-xylosidase | 1,25 | 1,16 | 1,98 |
| SL3716 | <i>yicJ</i> | Inner membrane symporter yicJ | 1,23 | -1,03 | 2,54 |
| SL3717 | - | Hypothetical | 1,14 | 1,45 | 1,06 |
| SL3718 | - | Hypothetical | 1,15 | 1,13 | 1,96 |
| SL3719 | - | Hypothetical | 1,54 | 1,07 | 1,50 |
| SL3720 | - | Hypothetical | 1,02 | 1,06 | 1,59 |
| SL3721 | - | Hypothetical Protein SL3721 | 1,06 | 1,02 | 1,16 |
| SL3722 | <i>yqeH</i> | Uncharacterized protein yqeH | -1,02 | -1,00 | -1,09 |
| SL3723 | <i>yuaQ</i> | Uncharacterized protein yuaQ | -1,03 | 1,04 | 1,72 |
| SL3724 | <i>yqeJ</i> | Uncharacterized protein yqeJ | -1,14 | 1,08 | -1,10 |
| SL3725 | <i>yqel</i> | Uncharacterized protein yqel | 1,18 | 1,05 | -1,40 |
| SL3726 | <i>ycaC</i> | Uncharacterized protein ycaC | 1,41 | 1,43 | -1,31 |
| SL3727 | - | Hypothetical | -1,20 | 1,15 | -1,14 |
| SL3728 | <i>mgtB</i> | Magnesium-transporting ATPase, P-type 1 | -1,69 | 1,21 | -4,80 |
| SL3729 | <i>mgtC</i> | Protein mgtC | -1,98 | 1,06 | -24,09 |
| SL3730 | <i>yicL</i> | Uncharacterized inner membrane transporter yicL | -1,04 | -1,10 | -1,08 |
| SL3731 | <i>yfcl</i> | Uncharacterized protein yfcl | -1,03 | 1,11 | 1,97 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL3732 | - | Hypothetical | 1,12 | -1,04 | 1,45 |
| SL3733 | <i>selA</i> | Uncharacterized protein mlr3804 | 1,25 | 1,07 | 1,61 |
| SL3734 | <i>manZ</i> | Mannose permease IID component | 1,12 | 1,23 | 1,61 |
| SL3735 | <i>agaC</i> | N-acetylgalactosamine permease IIC component 1 | -1,04 | 1,05 | 1,30 |
| SL3736 | <i>levE</i> | Fructose-specific phosphotransferase enzyme IIB component | -1,04 | 1,28 | 1,42 |
| SL3737 | <i>manX</i> | PTS System Fructose Subfamily IIA Component | 1,07 | 1,25 | 1,20 |
| SL3738 | <i>levR</i> | Transcriptional regulatory protein levR | 1,15 | 1,07 | 2,12 |
| SL3739 | <i>yicS</i> | Uncharacterized protein yicS | 1,08 | 1,19 | 1,22 |
| SL3740 | <i>gmuD</i> | 6-phospho-beta-glucosidase gmuD | 1,31 | 1,12 | 2,95 |
| SL3741 | <i>nepI</i> | Purine ribonucleoside efflux pump nepI | 1,49 | 1,04 | -1,01 |
| SL3742 | <i>nepI</i> | Purine ribonucleoside efflux pump nepI | 1,26 | -1,01 | -4,69 |
| SL3743 | - | Hypothetical | 1,50 | 1,54 | 3,57 |
| SL3744 | <i>yiaG</i> | Transcriptional Regulator XRE Family | 1,35 | 1,35 | 3,84 |
| SL3745 | <i>ptsH</i> | Conserved Hypothetical Protein | 1,45 | -1,39 | 1,17 |
| SL3746 | <i>kbaY</i> | D-tagatose-1,6-bisphosphate aldolase subunit kbaY | 1,12 | -1,15 | 1,10 |
| SL3747 | <i>glpK</i> | Glycerol kinase | 1,22 | -1,62 | -1,07 |
| SL3748 | <i>gatC</i> | Galactitol permease IIC component | 1,05 | -1,02 | 1,08 |
| SL3749 | <i>gatB</i> | Galactitol-specific phosphotransferase enzyme IIB component | 1,11 | -1,10 | 1,16 |
| SL3750 | <i>gatA</i> | PTS IIA-Like Nitrogen-Regulatory Protein PtsN | 1,08 | -1,01 | 1,99 |
| SL3751 | <i>mngR</i> | Mannosyl-D-glycerate transport/metabolism system repressor mngR | 1,24 | 1,41 | 3,65 |
| SL3752 | <i>yicN</i> | Uncharacterized protein yicN | -1,14 | 1,05 | 1,11 |
| SL3753 | <i>uhpT</i> | Hexose phosphate transport protein | -1,82 | 1,08 | 1,42 |
| SL3754 | <i>uhpC</i> | Regulatory protein uhpC | 1,05 | -1,02 | 1,36 |
| SL3755 | <i>uhpB</i> | Sensor protein uhpB | -1,24 | -1,12 | -1,28 |
| SL3756 | <i>uhpA</i> | Transcriptional regulatory protein uhpA | -1,11 | 1,19 | -2,39 |
| SL3757 | - | Hypothetical | 1,24 | 1,05 | 3,49 |
| SL3758 | <i>fucP</i> | L-fucose-proton symporter | 1,25 | -1,02 | 3,39 |
| SL3759 | <i>rbsK</i> | Ribokinase | 1,14 | 1,11 | 3,60 |
| SL3760 | <i>deoR</i> | Deoxyribose operon repressor | 1,28 | -1,00 | 2,51 |
| SL3761 | <i>ilvN</i> | Acetolactate synthase isozyme 1 small subunit | 1,53 | 1,09 | 4,96 |
| SL3762 | <i>ilvB</i> | Acetolactate synthase isozyme 1 large subunit | 1,51 | 1,08 | 5,91 |
| SL3763 | - | Hypothetical Protein SL3763 | -1,35 | 1,19 | -1,84 |
| SL3764 | - | Hypothetical Protein SL3764 | -1,12 | -1,42 | 1,09 |
| SL3765 | - | Hypothetical | 1,04 | -1,00 | -1,13 |
| SL3766 | <i>emrD</i> | Multidrug resistance protein D | 1,14 | 1,12 | -1,94 |
| SL3767 | - | Hypothetical | 1,23 | -1,00 | 2,32 |
| SL3768 | <i>dsdC</i> | HTH-type transcriptional regulator dsdC | 1,47 | 1,01 | 3,96 |
| SL3769 | <i>dsdX</i> | DsdX permease | 1,23 | 1,23 | 2,10 |
| SL3770 | <i>dsdA</i> | D-serine dehydratase | 1,35 | 1,12 | 1,53 |
| SL3771 | <i>yidF</i> | Uncharacterized protein yidF | 1,14 | 1,11 | 1,26 |
| SL3772 | <i>yidG</i> | Inner membrane protein yidG | 1,06 | -1,11 | 1,37 |
| SL3773 | <i>yidH</i> | Inner membrane protein yidH | -1,13 | -1,16 | 1,28 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|------------------|--|-----------------------|-----------------------|---------------------------|
| SL3774 | <i>yidE</i> | Putative transport protein CKO_00031 | 1,42 | 1,43 | 5,60 |
| SL3775 | <i>ibpB</i> | Small heat shock protein ibpB | -1,03 | 1,20 | 1,19 |
| SL3776 | <i>ibpA</i> | Small heat shock protein ibpA | 1,29 | 1,47 | 3,13 |
| SL3777 | <i>yidQ</i> | Uncharacterized protein yidQ | 1,12 | 1,01 | 1,43 |
| SL3778 | <i>yidR</i> | Uncharacterized protein yidR | 1,01 | -1,03 | -1,25 |
| SL3779 | <i>ccmH</i> | Cytochrome c-type biogenesis protein ccmH | -1,06 | -1,18 | 1,55 |
| SL3780 | (<i>dsbE1</i>) | Thiol:disulfide interchange protein dsbE | -1,04 | -1,10 | 1,10 |
| SL3781 | <i>ccmF</i> | Cytochrome c-type biogenesis protein ccmF | 1,05 | 1,00 | 1,13 |
| SL3782 | <i>ccmE1</i> | Cytochrome c-type biogenesis protein ccmE 1 | 1,08 | 1,15 | -1,29 |
| SL3783 | <i>ccmC</i> | Heme exporter protein C | 1,15 | 1,14 | -1,37 |
| SL3784 | <i>ccmB</i> | Heme exporter protein B | -1,16 | -1,17 | -1,76 |
| SL3785 | <i>ccmAE</i> | Putative bifunctional cytochrome c-type biogenesis protein ccmAE | -1,10 | -1,05 | -1,67 |
| SL3786 | <i>yhjA</i> | Probable cytochrome c peroxidase | -1,07 | -1,11 | -2,69 |
| SL3787 | <i>torD</i> | Chaperone protein torD | 1,07 | -1,04 | -1,40 |
| SL3788 | <i>torA</i> | Trimethylamine-N-oxide reductase | 1,25 | 1,11 | -1,03 |
| SL3789 | <i>torC</i> | Cytochrome c-type protein torC | 1,30 | -1,04 | -3,23 |
| SL3790 | <i>torR</i> | TorCAD operon transcriptional regulatory protein torR | 1,28 | -1,04 | 4,44 |
| SL3791 | <i>torT</i> | Periplasmic protein torT | 1,10 | 1,18 | -1,04 |
| SL3792 | <i>torS</i> | Sensor protein torS | 1,02 | 1,09 | -1,15 |
| SL3793 | <i>dgoT</i> | D-galactonate transporter | 1,67 | 1,10 | 2,84 |
| SL3794 | <i>dgoD1</i> | D-galactonate dehydratase 1 | 1,47 | 1,07 | 3,20 |
| SL3795 | <i>dgoA</i> | 2-dehydro-3-deoxy-6-phosphogalactonate aldolase | 1,43 | 1,31 | 2,97 |
| SL3796 | <i>dgoK</i> | 2-dehydro-3-deoxygalactonokinase | 1,05 | -1,14 | 2,37 |
| SL3797 | <i>dgoR</i> | Galactonate operon transcriptional repressor | -1,02 | -1,09 | 2,58 |
| SL3798 | <i>yidA</i> | Phosphatase yidA | -1,12 | -1,09 | -1,43 |
| SL3799 | <i>gudP</i> | Probable glucarate transporter | -1,03 | -1,11 | 4,70 |
| SL3800 | <i>dgoD</i> | D-galactonate dehydratase | -1,02 | 1,03 | 3,13 |
| SL3801 | <i>ybhD</i> | Uncharacterized HTH-type transcriptional regulator ybhD | 1,43 | 1,16 | 4,56 |
| SL3802 | <i>gyrB</i> | DNA gyrase subunit B | 1,25 | 1,01 | -1,25 |
| SL3803 | <i>recF</i> | DNA replication and repair protein recF | 1,22 | -1,05 | -1,14 |
| SL3804 | <i>dnaN</i> | DNA polymerase III subunit beta | 1,04 | -1,06 | -1,04 |
| SL3805 | <i>dnaA</i> | Chromosomal replication initiator protein dnaA | 1,02 | 1,07 | -2,05 |
| SL3806 | <i>rpmH</i> | 50S ribosomal protein L34 | -1,09 | 1,07 | -2,20 |
| SL3807 | <i>rnpA</i> | Ribonuclease P protein component | -1,08 | 1,00 | -2,10 |
| SL3808 | <i>hlyA</i> | Putative alpha-hemolysin | 1,03 | 1,17 | -1,89 |
| SL3809 | <i>oxaA</i> | Inner membrane protein oxaA | -1,06 | -1,15 | -1,97 |
| SL3810 | <i>mnmE</i> | tRNA modification GTPase mnmE | 1,17 | 1,06 | 1,05 |
| SL3811 | <i>intA</i> | Prophage CP4-57 integrase | -1,46 | -1,21 | -1,99 |
| SL3812 | - | Inner Membrane Protein | -1,07 | -1,24 | -1,04 |
| SL3813 | - | RNA-directed DNA polymerase from retrón EC86 | 1,13 | 1,02 | 1,24 |
| SL3814 | <i>mdtL</i> | Multidrug resistance protein mdtL | 1,00 | -1,06 | -3,71 |
| SL3815 | <i>yidZ</i> | HTH-type transcriptional regulator yidZ | 1,31 | 1,12 | -1,14 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL3816 | <i>yieE</i> | Uncharacterized protein <i>yieE</i> | 1,11 | 1,24 | 1,12 |
| SL3817 | <i>yieF</i> | Uncharacterized protein <i>yieF</i> | 1,12 | 1,01 | 1,77 |
| SL3818 | <i>purP</i> | Probable adenine permease PurP | -1,18 | 1,00 | -2,73 |
| SL3819 | <i>yieH</i> | Phosphatase <i>yieH</i> | -1,19 | -1,09 | -1,14 |
| SL3820 | <i>phoU</i> | Phosphate transport system protein <i>phoU</i> | 1,33 | 1,41 | 1,44 |
| SL3821 | <i>pstB</i> | Phosphate import ATP-binding protein <i>pstB</i> | 1,16 | 1,39 | 1,28 |
| SL3822 | <i>pstA</i> | Phosphate transport system permease protein <i>psta</i> | 1,29 | 1,49 | 1,34 |
| SL3823 | <i>pstC</i> | Phosphate transport system permease protein <i>pstC</i> | 1,19 | 1,33 | 1,12 |
| SL3824 | <i>pstS</i> | Phosphate-binding protein <i>pstS</i> | 1,01 | 1,24 | -1,35 |
| SL3825 | <i>fruA</i> | PTS system fructose-specific EIIBC component | 1,11 | -1,03 | 1,58 |
| SL3826 | <i>ydiB</i> | Shikimate 5-dehydrogenase-like protein HI_0607 | -1,07 | -1,52 | -1,37 |
| SL3827 | <i>sgrR</i> | HTH-type transcriptional regulator <i>sgrR</i> | 1,01 | -1,23 | 2,56 |
| SL3828 | <i>glmS</i> | Glucosamine--fructose-6-phosphate aminotransferase [isomerizing] | 1,09 | -1,06 | 1,67 |
| SL3829 | <i>glmU</i> | Bifunctional protein <i>glmU</i> | 1,06 | -1,08 | -1,27 |
| SL3830 | - | Hypothetical | 1,25 | -1,04 | 1,15 |
| SL3831 | <i>atpC</i> | ATP synthase epsilon chain | 1,19 | 1,07 | 3,56 |
| SL3832 | <i>atpD</i> | ATP synthase subunit beta | 1,06 | -1,12 | 1,94 |
| SL3833 | <i>atpG</i> | ATP synthase gamma chain | 1,01 | -1,31 | 2,51 |
| SL3834 | <i>atpA</i> | ATP synthase subunit alpha | 1,08 | -1,18 | 2,05 |
| SL3835 | <i>atpH</i> | ATP synthase subunit delta | -1,05 | -1,17 | 2,01 |
| SL3836 | <i>atpF</i> | ATP synthase subunit b | -1,01 | -1,14 | 1,60 |
| SL3837 | <i>atpE</i> | ATP synthase subunit c | 1,06 | -1,03 | 1,18 |
| SL3838 | <i>atpB</i> | ATP synthase subunit a | -1,10 | -1,03 | -1,38 |
| SL3839 | <i>atpI</i> | ATP synthase protein I | -1,12 | -1,00 | -1,22 |
| SL3840 | <i>rsmG</i> | Ribosomal RNA small subunit methyltransferase G | 1,11 | 1,07 | -1,02 |
| SL3841 | <i>mnmG</i> | tRNA uridine 5-carboxymethylaminomethyl modification enzyme <i>mnmG</i> | -1,01 | -1,03 | -1,70 |
| SL3842 | <i>mioC</i> | Protein <i>mioC</i> | 1,08 | 1,05 | -2,43 |
| SL3843 | <i>asnC</i> | Regulatory protein <i>AsnC</i> | -1,05 | -1,20 | 1,36 |
| SL3844 | <i>asnA</i> | Aspartate--ammonia ligase | 1,22 | 1,01 | 1,33 |
| SL3845 | <i>viaA</i> | Protein <i>viaA</i> | 1,27 | -1,09 | -1,09 |
| SL3846 | <i>ravA</i> | ATPase <i>ravA</i> | 1,17 | -1,00 | 1,27 |
| SL3847 | <i>kup</i> | Low affinity potassium transport system protein <i>kup</i> | 1,09 | 1,20 | -1,78 |
| SL3848 | <i>rbsD</i> | D-ribose pyranase | -2,94 | -1,06 | -2,87 |
| SL3849 | <i>rbsA1</i> | Ribose import ATP-binding protein <i>RbsA 1</i> | -3,09 | -1,10 | -2,95 |
| SL3850 | <i>rbsC</i> | Ribose transport system permease protein <i>rbsC</i> | -1,26 | 1,14 | -1,57 |
| SL3851 | <i>rbsB</i> | D-ribose-binding periplasmic protein | 1,20 | 1,08 | 2,16 |
| SL3852 | <i>rbsK</i> | Ribokinase | 1,14 | 1,02 | 1,87 |
| SL3853 | <i>rbsR</i> | Ribose operon repressor | 1,27 | -1,00 | 1,35 |
| SL3854 | <i>hsrA</i> | Probable transport protein <i>hsrA</i> | 1,41 | 1,06 | 1,30 |
| SL3855 | <i>hsrA</i> | Probable transport protein <i>hsrA</i> | 1,08 | -1,00 | 1,26 |
| SL3856 | <i>hsrA</i> | Probable transport protein <i>hsrA</i> | 1,29 | -1,03 | 1,71 |
| SL3857 | <i>yieP</i> | Uncharacterized HTH-type transcriptional regulator <i>yieP</i> | 1,21 | -1,02 | 2,53 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL3858 | <i>hdfR</i> | HTH-type transcriptional regulator hdfR | -1,08 | -1,32 | -1,31 |
| SL3859 | <i>yifE</i> | UPF0438 protein yifE | 1,10 | 1,25 | 1,55 |
| SL3860 | <i>yifB</i> | Uncharacterized protein yifB | -1,06 | -1,12 | -1,00 |
| SL3861 | <i>ilvG</i> | Acetolactate synthase isozyme 2 large subunit | -1,19 | 1,08 | 3,17 |
| SL3862 | <i>ilvM</i> | Acetolactate synthase isozyme 2 small subunit | -1,01 | 1,08 | 5,19 |
| SL3863 | <i>ilvE</i> | Branched-chain-amino-acid aminotransferase | 1,05 | -1,06 | 1,95 |
| SL3864 | <i>ilvD</i> | Dihydroxy-acid dehydratase | 1,26 | -1,03 | 1,90 |
| SL3865 | <i>ilvA</i> | Threonine dehydratase biosynthetic | 1,35 | -1,06 | 2,36 |
| SL3866 | - | Hypothetical | 1,39 | 1,25 | 1,32 |
| SL3867 | - | Hypothetical | 1,40 | 1,35 | 1,58 |
| SL3868 | <i>ilvY</i> | HTH-type transcriptional regulator ilvY | 1,01 | 1,05 | 1,85 |
| SL3869 | <i>ilvC</i> | Ketol-acid reductoisomerase | 1,31 | 1,17 | -1,25 |
| SL3870 | <i>ppiC</i> | Peptidyl-prolyl cis-trans isomerase C | 1,19 | -1,33 | -1,35 |
| SL3871 | - | Inner Membrane Protein | 1,23 | -1,17 | 1,45 |
| SL3872 | <i>rep</i> | ATP-dependent DNA helicase rep | 1,13 | 1,08 | -1,14 |
| SL3873 | <i>gppA</i> | Guanosine-5'-triphosphate,3'-diphosphate pyrophosphatase | -1,03 | -1,19 | -2,09 |
| SL3874 | <i>rhlB</i> | ATP-dependent RNA helicase rhlB | -1,08 | -1,34 | -2,45 |
| SL3875 | <i>trxA</i> | Thioredoxin-1 | -1,08 | 1,03 | -1,73 |
| SL3876 | <i>rho</i> | Transcription termination factor rho | -1,08 | 1,01 | -3,61 |
| SL3877 | <i>wecA</i> | Undecaprenyl-phosphate alpha-N-acetylglucosaminyl 1-phosphate transferase | 1,10 | 1,13 | -1,83 |
| SL3878 | <i>wzzE</i> | Lipopolysaccharide biosynthesis protein wzzE | 1,03 | 1,14 | -1,65 |
| SL3879 | <i>wecB</i> | UDP-N-acetylglucosamine 2-epimerase | 1,13 | -1,03 | -1,57 |
| SL3880 | <i>wecC</i> | UDP-N-acetyl-D-mannosamine dehydrogenase | 1,16 | -1,05 | -1,04 |
| SL3881 | <i>rffG</i> | dTDP-glucose 4,6-dehydratase 2 | 1,27 | 1,01 | 1,15 |
| SL3882 | <i>rmlA2</i> | Glucose-1-phosphate thymidylyltransferase 2 | 1,44 | 1,03 | 1,21 |
| SL3883 | <i>rffC</i> | Lipopolysaccharide biosynthesis protein rffC | 1,17 | 1,00 | 1,03 |
| SL3884 | <i>rffA</i> | Lipopolysaccharide biosynthesis protein rffA | 1,17 | 1,08 | 1,04 |
| SL3885 | <i>wzxE</i> | Protein wzxE | -1,02 | -1,18 | -1,66 |
| SL3886 | <i>wecF</i> | 4-alpha-L-fucosyltransferase | -1,00 | -1,11 | -1,46 |
| SL3887 | <i>wzyE</i> | Putative ECA polymerase | 1,26 | -1,02 | -1,03 |
| SL3888 | <i>wecG</i> | Probable UDP-N-acetyl-D-mannosaminuronic acid transferase | 1,38 | 1,03 | 1,38 |
| SL3889 | <i>yifK</i> | Probable transport protein yifK | -1,19 | -1,24 | 1,60 |
| SL3890 | <i>hemY</i> | Protein hemY | 1,13 | -1,21 | 1,19 |
| SL3891 | <i>hemX</i> | Putative uroporphyrinogen-III C-methyltransferase | 1,04 | -1,12 | 1,07 |
| SL3892 | <i>hemD</i> | Uroporphyrinogen-III synthase | 1,17 | 1,06 | 1,05 |
| SL3893 | <i>hemC</i> | Porphobilinogen deaminase | 1,21 | 1,07 | 1,24 |
| SL3894 | <i>cyaA</i> | Adenylate cyclase | -1,09 | 1,05 | -2,83 |
| SL3895 | - | Inner Membrane Protein | 1,68 | -1,13 | -1,09 |
| SL3896 | - | Hypothetical | 1,28 | 1,27 | -1,02 |
| SL3897 | - | Hypothetical | 1,36 | 1,14 | 1,06 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>greA</i> vs | <i>greB</i> vs | <i>greAgreB</i> |
|--------|-------------|--|----------------|----------------|-----------------|
| | | | WT | WT | vs WT |
| SL3898 | <i>cyaY</i> | Protein <i>cyaY</i> | 1,17 | -1,02 | 1,87 |
| SL3899 | - | Hypothetical | 1,58 | 1,44 | -1,02 |
| SL3900 | <i>yifL</i> | Uncharacterized lipoprotein <i>yifL</i> | 1,26 | -1,02 | 1,22 |
| SL3901 | <i>dapF</i> | Diaminopimelate epimerase | 1,05 | -1,06 | -1,03 |
| SL3902 | <i>yigA</i> | Uncharacterized protein <i>yigA</i> | 1,05 | -1,09 | -1,22 |
| SL3903 | <i>xerC</i> | Tyrosine recombinase <i>xerC</i> | -1,10 | -1,39 | -2,00 |
| SL3904 | <i>yigB</i> | Uncharacterized protein <i>yigB</i> | -1,03 | -1,26 | -1,61 |
| SL3905 | <i>uvrD</i> | DNA helicase II | 1,03 | 1,06 | -1,16 |
| SL3906 | <i>corA</i> | Magnesium transport protein <i>corA</i> | -1,33 | 1,07 | -3,08 |
| SL3907 | <i>yigF</i> | Uncharacterized protein <i>yigF</i> | -1,18 | 1,24 | -1,78 |
| SL3908 | <i>yigG</i> | Inner membrane protein <i>yigG</i> | 1,30 | -1,03 | -1,57 |
| SL3909 | <i>rarD</i> | Protein <i>rarD</i> | 1,18 | -1,21 | -1,16 |
| SL3910 | <i>yigI</i> | Uncharacterized protein <i>yigI</i> | 1,07 | 1,31 | 1,75 |
| SL3911 | <i>pldA</i> | Phospholipase A1 | 1,17 | 1,01 | -1,24 |
| SL3912 | <i>recQ</i> | ATP-dependent DNA helicase <i>recQ</i> | 1,04 | -1,01 | -1,48 |
| SL3913 | <i>rhtC</i> | Threonine efflux protein | 1,01 | -1,12 | -1,17 |
| SL3914 | <i>rhtB</i> | Homoserine/homoserine lactone efflux protein | -1,08 | 1,14 | 1,18 |
| SL3915 | <i>pldB</i> | Lysophospholipase L2 | 1,08 | -1,08 | -1,25 |
| SL3916 | <i>yigL</i> | Uncharacterized protein <i>yigL</i> | -1,14 | -1,18 | -1,39 |
| SL3917 | <i>yigM</i> | Uncharacterized membrane protein <i>yigM</i> | -1,10 | -1,11 | -1,15 |
| SL3918 | <i>metR</i> | HTH-type transcriptional regulator <i>metR</i> | -1,10 | 1,08 | -1,14 |
| SL3919 | <i>metE</i> | 5-methyltetrahydropteroylglutamate--homocysteine methyltransferase | -1,17 | 1,10 | 1,57 |
| SL3920 | <i>aslB</i> | Anaerobic sulfatase-maturing enzyme homolog <i>AslB</i> | 1,04 | -1,23 | 1,00 |
| SL3921 | <i>ysgA</i> | Putative carboxymethylenebutenolidase | 1,12 | 1,04 | 1,88 |
| SL3922 | <i>udp</i> | Uridine phosphorylase | 1,14 | 1,17 | -1,01 |
| SL3923 | <i>rmuC</i> | DNA recombination protein <i>rmuC</i> | 1,12 | 1,12 | 1,55 |
| SL3924 | <i>ubiE</i> | Ubiquinone/menaquinone biosynthesis methyltransferase <i>ubiE</i> | 1,04 | -1,14 | 1,13 |
| SL3925 | <i>yigP</i> | Uncharacterized protein <i>yigP</i> | -1,02 | -1,21 | 1,12 |
| SL3926 | <i>ubiB</i> | Probable ubiquinone biosynthesis protein <i>ubiB</i> | 1,10 | -1,13 | -1,04 |
| SL3927 | <i>tatA</i> | Sec-independent protein translocase protein <i>tatA</i> | 1,04 | 1,09 | -1,31 |
| SL3928 | <i>tatB</i> | Sec-independent protein translocase protein <i>tatB</i> homolog | -1,00 | -1,02 | -1,45 |
| SL3929 | <i>tatC</i> | Sec-independent protein translocase protein <i>tatC</i> | 1,04 | -1,01 | -1,94 |
| SL3930 | <i>tatD</i> | Deoxyribonuclease <i>tatD</i> | 1,06 | -1,12 | 1,11 |
| SL3931 | <i>rfaH</i> | Transcriptional activator <i>rfaH</i> | 1,18 | 1,02 | -1,05 |
| SL3932 | <i>ubiD</i> | 3-octaprenyl-4-hydroxybenzoate carboxy-lyase | 1,11 | -1,15 | 1,09 |
| SL3933 | <i>fre</i> | NAD(P)H-flavin reductase | 1,13 | -1,28 | 1,26 |
| SL3934 | - | Arylsulfotransferase | 1,16 | -1,10 | 1,80 |
| SL3935 | <i>fadA</i> | 3-ketoacyl-CoA thiolase | -1,12 | -1,11 | 23,14 |
| SL3936 | <i>fadB</i> | Fatty acid oxidation complex subunit alpha | -1,07 | 1,23 | 22,96 |
| SL3937 | <i>pepQ</i> | Xaa-Pro dipeptidase | 1,10 | -1,28 | 1,74 |
| SL3938 | <i>yigZ</i> | IMPACT family member <i>yigZ</i> | 1,24 | -1,35 | 1,04 |
| SL3939 | <i>trkH</i> | Trk system potassium uptake protein <i>trkH</i> | 1,12 | -1,17 | -1,11 |
| SL3940 | <i>hemG</i> | Protoporphyrinogen oxidase | 1,04 | -1,16 | 1,26 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|---------------|---|-------------------|-------------------|-----------------------|
| SL3941 | <i>mobB</i> | Molybdopterin-guanine dinucleotide biosynthesis protein B | 1,11 | 1,07 | -1,12 |
| SL3942 | <i>mobA</i> | Molybdopterin-guanine dinucleotide biosynthesis protein A | 1,16 | 1,02 | 1,40 |
| SL3943 | <i>yihD</i> | Protein yihD | 1,06 | 1,15 | 1,44 |
| SL3944 | <i>rdoA</i> | Protein rdoA | 1,04 | -1,11 | -1,43 |
| SL3945 | <i>dsbA</i> | Thiol:disulfide interchange protein dsbA | -1,13 | -1,13 | -1,36 |
| SL3946 | <i>yihG</i> | Probable acyltransferase yihG | 1,08 | 1,05 | -1,62 |
| SL3947 | <i>polA</i> | DNA polymerase I | 1,21 | 1,18 | 1,89 |
| SL3948 | <i>engB</i> | Probable GTP-binding protein engB | 1,03 | 1,02 | -1,17 |
| SL3949 | - | Hypothetical | 1,26 | 1,85 | -1,15 |
| SL3950 | <i>yihI</i> | UPF0241 protein yihI | 1,04 | -1,00 | -1,10 |
| SL3951 | <i>hemN</i> | Oxygen-independent coproporphyrinogen-III oxidase | 1,07 | -1,04 | -1,39 |
| SL3952 | <i>glnG</i> | Nitrogen regulation protein NR(I) | 1,25 | 1,22 | 1,05 |
| SL3953 | <i>glnL</i> | Nitrogen regulation protein NR(II) | 1,34 | 1,24 | -1,29 |
| SL3954 | <i>glnA</i> | Glutamine synthetase | 1,18 | 1,24 | -1,77 |
| SL3955 | <i>typA</i> | GTP-binding protein TypA/BipA | 1,11 | 1,08 | -2,44 |
| SL3956 | <i>ybhA</i> | Phosphatase ybhA | 1,07 | -1,16 | -1,26 |
| SL3957 | - | Hypothetical | 1,12 | -1,26 | -1,38 |
| SL3958 | <i>hemN</i> | Oxygen-independent coproporphyrinogen-III oxidase | -1,16 | 1,10 | -1,13 |
| SL3959 | - | Hypothetical | -1,02 | 1,08 | 1,01 |
| SL3960 | - | Hypothetical | 1,17 | 1,03 | -1,15 |
| SL3961 | - | Hypothetical | -1,19 | -1,13 | 2,67 |
| SL3962 | <i>ompL</i> | Porin ompL | 1,29 | -1,12 | 3,58 |
| SL3963 | <i>yihO</i> | Uncharacterized symporter yihO | 1,17 | -1,02 | 2,27 |
| SL3964 | <i>yihP</i> | Inner membrane symporter yihP | 1,33 | -1,13 | 2,70 |
| SL3965 | <i>yihQ</i> | Alpha-glucosidase yihQ | 1,27 | -1,07 | 2,10 |
| SL3966 | <i>yihR</i> | Uncharacterized protein yihR | 1,04 | -1,09 | 2,30 |
| SL3967 | <i>yihS</i> | Uncharacterized sugar isomerase yihS | 1,06 | -1,19 | 4,13 |
| SL3968 | <i>yihT</i> | Uncharacterized aldolase yihT | -1,06 | -1,69 | 4,63 |
| SL3969 | <i>yihU</i> | Uncharacterized oxidoreductase yihU | 1,17 | -1,17 | 6,23 |
| SL3970 | <i>yihV</i> | Uncharacterized sugar kinase yihV | 1,18 | 1,10 | 3,37 |
| SL3971 | <i>yihW</i> | Uncharacterized HTH-type transcriptional regulator yihW | 1,26 | 1,03 | 1,91 |
| SL3972 | <i>yihX</i> | Phosphatase yihX | -1,02 | 1,08 | 1,47 |
| SL3973 | <i>rbn</i> | UPF0761 membrane protein CKO_03126 | -1,14 | 1,01 | 1,32 |
| SL3974 | <i>dtd</i> | D-tyrosyl-tRNA(Tyr) deacylase | -1,26 | -1,10 | -1,02 |
| SL3975 | <i>yiiD</i> | Uncharacterized protein yiiD | -1,11 | -1,05 | 1,07 |
| SL3976 | <i>ygiM</i> | Uncharacterized HTH-type transcriptional regulator ygiM | -1,08 | -1,10 | 1,37 |
| SL3977 | <i>ygiN</i> | Uncharacterized protein ygiN | 1,03 | -1,00 | 2,34 |
| SL3978 | <i>est</i> | Esterase | 1,17 | -1,01 | 3,87 |
| SL3979 | <i>higB-2</i> | Toxin higB-2 | -1,03 | -1,15 | 2,12 |
| SL3980 | - | Transcriptional Regulator XRE Family | 1,06 | -1,11 | 2,21 |
| SL3981 | <i>fdhE</i> | Protein fdhE homolog | 1,02 | -1,18 | -1,21 |
| SL3982 | <i>fdoI</i> | Formate dehydrogenase, cytochrome b556(fdo) subunit | -1,02 | -1,26 | -1,34 |
| SL3983 | <i>fdoH</i> | Formate dehydrogenase-O iron-sulfur subunit | 1,08 | -1,06 | -1,06 |
| SL3984 | <i>fdoG</i> | Formate dehydrogenase-O major subunit | 1,02 | -1,14 | -1,05 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL3985 | <i>fdoG</i> | Formate dehydrogenase-O major subunit | 1,04 | -1,04 | 1,60 |
| SL3986 | <i>fdhD</i> | Protein fdhD | -1,04 | 1,08 | -2,32 |
| SL3987 | <i>yiiG</i> | Uncharacterized protein yiiG | 1,04 | 1,24 | -1,39 |
| SL3988 | <i>yiiG</i> | Uncharacterized protein yiiG | 1,13 | 1,01 | -1,05 |
| SL3989 | - | Hypothetical | 1,02 | 1,17 | -2,15 |
| SL3990 | <i>azlC</i> | Branched-chain amino acid transport protein AzlC | 1,15 | 1,12 | -1,79 |
| SL3991 | <i>ydcN</i> | Uncharacterized HTH-type transcriptional regulator ydcN | 1,17 | -1,07 | -1,24 |
| SL3992 | <i>rhaM</i> | L-rhamnose mutarotase | 1,89 | 1,14 | 1,46 |
| SL3993 | <i>yiaY</i> | Probable alcohol dehydrogenase | 1,63 | 1,51 | 1,98 |
| SL3994 | <i>rhaD</i> | Rhamnulose-1-phosphate aldolase | 1,14 | -1,20 | 1,83 |
| SL3995 | <i>rhaA</i> | L-rhamnose isomerase | 1,07 | -1,37 | 1,98 |
| SL3996 | <i>rhaB</i> | Rhamnulokinase | -1,11 | -1,01 | -1,07 |
| SL3997 | <i>rhaS</i> | HTH-type transcriptional activator rhaS | 1,24 | 1,44 | 7,48 |
| SL3998 | <i>rhaR</i> | HTH-type transcriptional activator rhaR | 1,11 | 1,18 | 3,48 |
| SL3999 | <i>rhaT</i> | L-rhamnose-proton symporter | 1,19 | 1,02 | -1,11 |
| SL4000 | <i>yiiY</i> | Uncharacterized protein yiiY | 1,02 | 1,16 | 1,86 |
| SL4001 | <i>ygiK</i> | Uncharacterized protein ygiK | -1,01 | 1,03 | 1,67 |
| SL4002 | <i>yiaM</i> | Tripartite ATP-Independent Periplasmic Transporter DctQ | -1,04 | 1,51 | 1,31 |
| SL4003 | <i>yiiZ</i> | Uncharacterized protein yiiZ | -1,08 | 1,29 | 1,03 |
| SL4004 | <i>sodA</i> | Superoxide dismutase [Mn] | -1,10 | 1,08 | -1,33 |
| SL4005 | <i>yiiM</i> | Protein yiiM | 1,09 | 1,00 | 1,29 |
| SL4006 | - | Hypothetical | -1,00 | -1,05 | 1,04 |
| SL4007 | <i>cpxA</i> | Sensor protein cpxA | -1,06 | -1,14 | -1,08 |
| SL4008 | <i>cpxR</i> | Transcriptional regulatory protein cpxR | -1,02 | -1,03 | 1,21 |
| SL4009 | <i>cpxP</i> | Periplasmic protein cpxP | -1,04 | 1,07 | -1,82 |
| SL4010 | <i>fieF</i> | Cation-efflux pump fieF | 1,13 | 1,02 | -1,45 |
| SL4011 | <i>pfkA</i> | 6-phosphofructokinase isozyme 1 | 1,21 | 1,16 | -1,27 |
| SL4012 | <i>sbp</i> | Sulfate-binding protein | 1,43 | 1,13 | 3,15 |
| SL4013 | <i>cdh</i> | CDP-diacylglycerol pyrophosphatase | -1,17 | 1,28 | 1,07 |
| SL4014 | <i>yagG</i> | Uncharacterized symporter yagG | 1,30 | 1,22 | 6,83 |
| SL4015 | <i>scrK</i> | Fructokinase | 1,32 | 1,14 | 7,32 |
| SL4016 | <i>yegU</i> | Uncharacterized protein yegU | 1,37 | 1,16 | 4,60 |
| SL4017 | <i>mngR</i> | Mannosyl-D-glycerate transport/metabolism system repressor mngR | 1,04 | -1,07 | 1,12 |
| SL4018 | - | Hypothetical | -1,08 | 1,22 | -2,00 |
| SL4019 | <i>cdh</i> | CDP-diacylglycerol pyrophosphatase | 1,01 | 1,06 | 2,10 |
| SL4020 | - | Conserved Hypothetical Protein | 1,21 | 1,00 | 3,55 |
| SL4021 | <i>lsrK</i> | Autoinducer 2 kinase lsrK | 1,15 | -1,14 | 5,12 |
| SL4022 | <i>lsrR</i> | Transcriptional regulator lsrR | 1,07 | 1,15 | 5,81 |
| SL4023 | <i>lsrA</i> | Autoinducer 2 import ATP-binding protein lsrA | -1,19 | 1,31 | 49,79 |
| SL4024 | <i>lsrC</i> | Autoinducer 2 import system permease protein lsrC | -1,24 | -1,20 | 18,13 |
| SL4025 | <i>lsrD</i> | Autoinducer 2 import system permease protein lsrD | -1,14 | -1,11 | 9,85 |
| SL4026 | <i>lsrB</i> | Autoinducer 2-binding protein lsrB | 1,24 | 1,13 | 1,79 |
| SL4027 | <i>lsrF</i> | Uncharacterized aldolase lsrF | 1,32 | -1,03 | 1,54 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>greA</i> vs | <i>greB</i> vs | <i>greAgreB</i> |
|--------|--------------|--|----------------|----------------|-----------------|
| | | | WT | WT | vs WT |
| SL4028 | <i>lsrG</i> | Autoinducer 2-degrading protein <i>lsrG</i> | 1,15 | 1,16 | 1,93 |
| SL4029 | <i>lsrE</i> | Putative epimerase <i>lsrE</i> | 1,24 | 1,12 | 1,81 |
| SL4030 | <i>tpiA</i> | Triosephosphate isomerase | 1,09 | -1,02 | -1,21 |
| SL4031 | <i>yiiQ</i> | Uncharacterized protein <i>yiiQ</i> | -1,07 | -1,45 | -1,65 |
| SL4032 | <i>yiiR</i> | Uncharacterized protein <i>yiiR</i> | 1,13 | -1,04 | -1,00 |
| SL4033 | <i>fpr</i> | Ferredoxin--NADP reductase | 1,10 | -1,01 | 1,18 |
| SL4034 | <i>glpX</i> | Fructose-1,6-bisphosphatase class 2 | -1,05 | -1,50 | 2,09 |
| SL4035 | <i>glpK</i> | Glycerol kinase | 1,02 | -1,03 | 1,80 |
| SL4036 | <i>glpF</i> | Glycerol uptake facilitator protein | 1,03 | -1,01 | 2,43 |
| SL4037 | <i>zapB</i> | Cell division protein <i>zapB</i> | 1,02 | 1,16 | 1,53 |
| SL4038 | <i>rraA</i> | Regulator of ribonuclease activity A | 1,00 | 1,03 | -1,20 |
| SL4039 | <i>menA</i> | 1,4-dihydroxy-2-naphthoate octaprenyltransferase | 1,07 | -1,01 | -2,24 |
| SL4040 | <i>hslU</i> | ATP-dependent protease ATPase subunit <i>HslU</i> | -1,06 | -1,05 | 1,42 |
| SL4041 | <i>hslV</i> | ATP-dependent protease subunit <i>HslV</i> | -1,08 | -1,10 | 1,22 |
| SL4042 | <i>ftsN</i> | Cell division protein <i>ftsN</i> | 1,18 | -1,05 | -1,62 |
| SL4043 | <i>cytR</i> | HTH-type transcriptional repressor <i>cytR</i> | 1,14 | -1,01 | 1,21 |
| SL4044 | <i>priA</i> | Primosomal protein N' | -1,12 | 1,14 | -1,99 |
| SL4045 | <i>rpmE</i> | 50S ribosomal protein L31 | 1,09 | -1,01 | 1,41 |
| SL4046 | - | Hypothetical | 1,25 | 1,08 | -1,08 |
| SL4047 | - | Arylsulfate Sulfotransferase | 1,05 | -1,06 | 2,61 |
| SL4048 | <i>metJ</i> | Met repressor | -1,09 | 1,05 | -1,21 |
| SL4049 | <i>metB</i> | Cystathione gamma-synthase | 1,01 | -1,07 | -1,71 |
| SL4050 | <i>metL</i> | Bifunctional aspartokinase/homoserine dehydrogenase 2 | 1,03 | -1,23 | 1,29 |
| SL4051 | <i>mscS</i> | Small-conductance mechanosensitive channel | -1,15 | -1,06 | -1,26 |
| SL4052 | - | Hypothetical | -1,00 | 1,04 | 1,03 |
| SL4053 | - | Hypothetical | 1,04 | 1,06 | 1,48 |
| SL4054 | <i>yfkN</i> | Trifunctional nucleotide phosphoesterase protein <i>yfkN</i> | -1,07 | 1,12 | 1,50 |
| SL4055 | <i>metF</i> | 5,10-methylenetetrahydrofolate reductase | -1,37 | 1,02 | -3,35 |
| SL4056 | <i>katG1</i> | Catalase-peroxidase 1 | 1,05 | 1,00 | -3,75 |
| SL4057 | <i>yijF</i> | Uncharacterized protein <i>yijF</i> | 1,33 | -1,25 | -8,02 |
| SL4058 | <i>gldA</i> | Glycerol dehydrogenase | 1,31 | 1,46 | 1,87 |
| SL4059 | <i>fsa</i> | Probable fructose-6-phosphate aldolase | 1,25 | 1,13 | 1,52 |
| SL4060 | <i>ptsA</i> | Multiphosphoryl transfer protein 2 | 1,41 | 1,33 | 2,52 |
| SL4061 | <i>frwC</i> | Fructose-like permease IIC component 2 | 1,36 | 1,35 | 5,71 |
| SL4062 | <i>frwB</i> | Fructose-like phosphotransferase enzyme IIB component 2 | 1,36 | 1,10 | 3,40 |
| SL4063 | <i>pflD</i> | Formate acetyltransferase 2 | 1,17 | 1,11 | 1,92 |
| SL4064 | <i>pflC</i> | Pyruvate formate-lyase 2-activating enzyme | 1,09 | 1,09 | 1,42 |
| SL4065 | <i>frwD</i> | Fructose-like phosphotransferase enzyme IIB component 3 | 1,18 | 1,16 | 1,56 |
| SL4066 | <i>yijO</i> | Uncharacterized HTH-type transcriptional regulator <i>yijO</i> | -1,05 | 1,06 | -1,42 |
| SL4067 | - | Hypothetical Protein SL4067 | 1,03 | -1,15 | -1,08 |
| SL4068 | <i>cptA</i> | Phosphoethanolamine transferase <i>cptA</i> | 1,02 | -1,03 | -1,64 |
| SL4069 | <i>ppc</i> | Phosphoenolpyruvate carboxylase | 1,10 | -1,19 | -1,26 |
| SL4070 | <i>argE</i> | Acetylornithine deacetylase | 1,28 | 1,11 | 1,47 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-------------------|-------------------|-----------------------|
| SL4071 | <i>argC</i> | N-acetyl-gamma-glutamyl-phosphate reductase | 1,16 | 1,06 | 1,02 |
| SL4072 | <i>argB</i> | Acetylglutamate kinase | 1,24 | 1,15 | 1,50 |
| SL4073 | <i>argH</i> | Argininosuccinate lyase | 1,16 | -1,09 | 1,31 |
| SL4074 | <i>oxyR</i> | Hydrogen peroxide-inducible genes activator | 1,12 | -1,03 | 1,71 |
| SL4075 | <i>sthA</i> | Soluble pyridine nucleotide transhydrogenase | -1,05 | -1,16 | 2,56 |
| SL4076 | <i>fabR</i> | HTH-type transcriptional repressor fabR | 1,15 | 1,08 | 1,35 |
| SL4077 | <i>yijD</i> | Inner membrane protein yijD | 1,30 | 1,09 | 1,88 |
| SL4078 | <i>trmA</i> | tRNA (uracil-5-)methyltransferase | 1,06 | 1,07 | -1,99 |
| SL4079 | <i>btuB</i> | Vitamin B12 transporter BtuB | 1,05 | -1,52 | 1,63 |
| SL4080 | <i>murl</i> | Glutamate racemase | 1,09 | -1,21 | -1,15 |
| SL4081 | <i>murB</i> | UDP-N-acetylenolpyruvoylglucosamine reductase | 1,18 | 1,02 | -1,41 |
| SL4082 | <i>birA</i> | Bifunctional protein BirA | 1,11 | 1,12 | -1,12 |
| SL4083 | <i>coaA</i> | Pantothenate kinase | 1,11 | 1,12 | -1,48 |
| SL4084 | - | Hypothetical | -1,28 | 1,01 | -1,17 |
| SL4085 | <i>tuf1</i> | Elongation factor Tu 1 | 1,00 | -1,02 | 1,25 |
| SL4086 | <i>secE</i> | Preprotein translocase subunit secE | 1,05 | -1,06 | -1,38 |
| SL4087 | <i>nusG</i> | Transcription antitermination protein nusG | 1,10 | 1,00 | -1,23 |
| SL4088 | <i>rplK</i> | 50S ribosomal protein L11 | -1,04 | 1,03 | -1,15 |
| SL4089 | <i>rplA</i> | 50S ribosomal protein L1 | -1,16 | -1,09 | -1,13 |
| SL4090 | <i>rplJ</i> | 50S ribosomal protein L10 | -1,07 | -1,10 | -1,03 |
| SL4091 | <i>rplL</i> | 50S ribosomal protein L7/L12 | -1,16 | -1,21 | -1,13 |
| SL4092 | <i>rpoB</i> | DNA-directed RNA polymerase subunit beta | 1,12 | -1,09 | 1,63 |
| SL4093 | <i>rpoC</i> | DNA-directed RNA polymerase subunit beta' | 1,17 | 1,01 | 2,04 |
| SL4094 | - | Inner Membrane Protein | 1,20 | -1,18 | 1,11 |
| SL4095 | - | Hypothetical | 1,49 | 1,09 | 1,16 |
| SL4096 | - | Cytoplasmic Protein | 1,01 | -1,19 | 1,15 |
| SL4097 | - | Hypothetical | -1,33 | 1,16 | -1,09 |
| SL4098 | <i>thiH</i> | Dehydroglycine synthase | 1,23 | 1,13 | 3,47 |
| SL4099 | <i>thiG</i> | Thiazole synthase | 1,42 | 1,35 | 4,86 |
| SL4100 | <i>thiS</i> | Sulfur carrier protein ThiS | 1,69 | 1,23 | 3,53 |
| SL4101 | <i>thiF</i> | Sulfur carrier protein ThiS adenylyltransferase | 1,43 | -1,04 | 4,02 |
| SL4102 | <i>thiE</i> | Thiamine-phosphate pyrophosphorylase | 1,31 | -1,10 | 3,49 |
| SL4103 | <i>thiC</i> | Phosphomethylpyrimidine synthase | 1,36 | 1,01 | 3,16 |
| SL4104 | <i>rsd</i> | Regulator of sigma D | -1,03 | 1,26 | 3,58 |
| SL4105 | <i>nudC</i> | NADH pyrophosphatase | 1,06 | -1,02 | -1,03 |
| SL4106 | <i>hemE</i> | Uroporphyrinogen decarboxylase | 1,14 | -1,03 | 1,49 |
| SL4107 | <i>nfi</i> | Endonuclease V | 1,15 | 1,05 | 1,57 |
| SL4108 | <i>yjaG</i> | Uncharacterized protein yjaG | 1,03 | -1,08 | -1,21 |
| SL4109 | <i>hupA</i> | DNA-binding protein HU-alpha | 1,02 | 1,03 | 1,33 |
| SL4110 | <i>yjaH</i> | Uncharacterized protein yjaH | -1,07 | -1,27 | -1,23 |
| SL4111 | <i>zraP</i> | Zinc resistance-associated protein | 1,57 | 1,64 | -2,57 |
| SL4112 | <i>zraS</i> | Sensor protein zraS | 1,18 | -1,03 | 2,34 |
| SL4113 | <i>zraR</i> | Transcriptional regulatory protein zraR | 1,24 | 1,03 | 1,88 |
| SL4114 | <i>purD</i> | Phosphoribosylamine--glycine ligase | 1,17 | 1,22 | 1,20 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-------------------|-------------------|-----------------------|
| SL4115 | <i>purH</i> | Bifunctional purine biosynthesis protein purH | 1,20 | 1,28 | -1,65 |
| SL4116 | <i>yjaB</i> | Uncharacterized N-acetyltransferase yjaB | 1,14 | 1,30 | 1,56 |
| SL4117 | <i>metA</i> | Homoserine O-succinyltransferase | -1,22 | -1,04 | 1,07 |
| SL4118 | <i>aceB</i> | Malate synthase A | -1,09 | -1,09 | 7,52 |
| SL4119 | <i>aceA</i> | Isocitrate lyase | -1,27 | -1,09 | 4,68 |
| SL4120 | <i>aceK</i> | Isocitrate dehydrogenase kinase/phosphatase | -1,00 | -1,11 | 1,52 |
| SL4121 | - | Hypothetical | -1,13 | -1,65 | 2,21 |
| SL4122 | <i>iclR</i> | Acetate operon repressor | -1,08 | -1,37 | 2,81 |
| SL4123 | <i>metH</i> | Methionine synthase | 1,12 | -1,18 | 1,58 |
| SL4124 | <i>yjbB</i> | Uncharacterized protein yjbB | 1,09 | 1,02 | 2,28 |
| SL4125 | <i>pepE</i> | Peptidase E | 1,06 | 1,02 | -1,03 |
| SL4126 | - | Hypothetical Protein SL4126 | 1,19 | 1,18 | -1,40 |
| SL4127 | <i>yaiL</i> | Uncharacterized protein yaiL | 1,02 | -1,01 | -1,24 |
| SL4128 | <i>rliF</i> | Ribosomal large subunit pseudouridine synthase F | -1,03 | -1,06 | -1,26 |
| SL4129 | <i>yjbD</i> | Uncharacterized protein yjbD | 1,19 | 1,03 | -1,05 |
| SL4130 | <i>yocS</i> | Uncharacterized sodium-dependent transporter yocs | -1,25 | 1,02 | 1,11 |
| SL4131 | - | Hypothetical | 1,02 | -1,17 | -4,83 |
| SL4132 | - | Inner Membrane Protein | 1,25 | -1,02 | 1,36 |
| SL4133 | - | Hypothetical | 1,16 | -1,42 | 1,39 |
| SL4134 | - | Cytoplasmic Protein | -1,01 | -1,23 | 2,11 |
| SL4135 | <i>stfR</i> | Tail Fiber Protein | -1,17 | -1,22 | 1,52 |
| SL4136 | - | Phage Tail Protein | -1,11 | -1,03 | -1,18 |
| SL4137 | - | Baseplate J Family Protein | -1,19 | -1,08 | -1,03 |
| SL4138 | - | Phage Baseplate Protein | 1,01 | -1,01 | -1,05 |
| SL4139 | - | Hypothetical | -1,05 | -1,20 | -1,01 |
| SL4140 | <i>gtrB</i> | SII prophage-derived bactoprenol glucosyl transferase | -1,15 | 1,03 | -2,31 |
| SL4141 | <i>yfdG</i> | Bactoprenol-linked glucose translocase homolog from prophage CPS-53 | -1,12 | 1,08 | -1,20 |
| SL4142 | - | Phage Baseplate Assembly Protein V | 1,32 | 1,09 | 3,49 |
| SL4143 | - | Late Control D Family Protein | 1,23 | -1,09 | 2,56 |
| SL4144 | - | Bacteriophage Tail Fibre Protein | 1,42 | 1,06 | 2,50 |
| SL4145 | - | Hypothetical | 1,19 | -1,01 | 2,10 |
| SL4146 | - | Phage Tail Protein | 1,06 | -1,16 | 2,84 |
| SL4147 | - | Hypothetical | 1,02 | 1,02 | 2,44 |
| SL4148 | - | Phage Tail Tube Protein | -1,14 | -1,20 | 1,89 |
| SL4149 | - | Phage Tail Sheath Protein | -1,25 | -1,08 | 1,74 |
| SL4150 | - | Cytoplasmic Protein | -1,87 | -1,84 | 1,29 |
| SL4151 | - | Hypothetical | 1,11 | 1,02 | 1,09 |
| SL4152 | - | Hypothetical | 1,03 | 1,34 | -1,00 |
| SL4153 | - | Lytic Transglycosylase Catalytic | -1,11 | 1,16 | -1,03 |
| SL4154 | - | Phage-Related Membrane Protein | -1,05 | -1,15 | 1,01 |
| SL4155 | <i>rdgB</i> | DNA-binding protein rdgB | 1,05 | 1,28 | 1,77 |
| SL4156 | <i>lysC</i> | Lysine-sensitive aspartokinase 3 | 1,13 | -1,15 | 1,32 |
| SL4157 | <i>pgi</i> | Glucose-6-phosphate isomerase | 1,07 | -1,05 | -1,07 |
| SL4158 | <i>yjbE</i> | Hypothetical Protein yjbE | 1,01 | 1,52 | -1,65 |
| SL4159 | <i>yjbF</i> | Uncharacterized lipoprotein yjbF | -1,15 | 1,05 | -2,28 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL4160 | <i>yjbG</i> | Uncharacterized protein yjbG | -1,01 | 1,05 | -1,70 |
| SL4161 | <i>yjbH</i> | Uncharacterized lipoprotein yjbH | 1,01 | 1,17 | 1,01 |
| SL4162 | <i>psiE</i> | Protein psiE | -1,22 | 1,16 | -3,30 |
| SL4163 | <i>malG</i> | Maltose transport system permease protein malG | 1,10 | -1,08 | -1,02 |
| SL4164 | <i>malF</i> | Maltose transport system permease protein malF | -1,01 | -1,23 | 1,14 |
| SL4165 | - | Hypothetical Protein SL4165 | -1,19 | -1,46 | 2,30 |
| SL4166 | <i>malE</i> | Maltose-binding periplasmic protein | 1,01 | -1,39 | 1,50 |
| SL4167 | <i>malK</i> | Maltose/maltodextrin import ATP-binding protein MalK | -1,91 | -2,04 | 1,67 |
| SL4168 | <i>lamB</i> | Maltoporin | 1,51 | -1,15 | 1,50 |
| SL4169 | <i>malM</i> | Maltose operon periplasmic protein | 1,12 | -1,38 | 1,06 |
| SL4170 | <i>ubiC</i> | Chorismate--pyruvate lyase | 1,29 | 1,13 | 2,11 |
| SL4171 | <i>ubiA</i> | 4-hydroxybenzoate octaprenyltransferase | 1,15 | 1,06 | 1,87 |
| SL4172 | <i>plsB</i> | Glycerol-3-phosphate acyltransferase | 1,13 | -1,22 | 1,12 |
| SL4173 | <i>dgkA</i> | Diacylglycerol kinase | 1,10 | 1,09 | 1,00 |
| SL4174 | <i>lexA</i> | LexA repressor | 1,13 | 1,16 | 2,28 |
| SL4175 | <i>dinF</i> | DNA-damage-inducible protein F | 1,24 | 1,02 | 1,06 |
| SL4176 | <i>yjbJ</i> | UPF0337 protein yjbJ | 1,07 | 1,14 | 1,09 |
| SL4177 | <i>zur</i> | Zinc uptake regulation protein | 1,09 | -1,04 | -1,02 |
| SL4178 | - | Hypothetical | -1,15 | -1,08 | 1,91 |
| SL4179 | <i>dusA</i> | tRNA-dihydrouridine synthase A | -1,03 | 1,03 | -1,05 |
| SL4180 | <i>pspG</i> | Phage shock protein G | -1,04 | 1,32 | -2,02 |
| SL4181 | <i>qorA</i> | Quinone oxidoreductase 1 | 1,22 | 1,36 | 1,83 |
| SL4182 | <i>dnaB</i> | Replicative DNA helicase | -1,13 | -1,19 | -1,60 |
| SL4183 | <i>alr</i> | Alanine racemase, biosynthetic | 1,08 | -1,24 | -1,05 |
| SL4184 | <i>tyrB</i> | Aromatic-amino-acid aminotransferase | 1,01 | -1,23 | -1,32 |
| SL4185 | <i>aphA</i> | Class B acid phosphatase | -1,19 | -1,10 | 2,41 |
| SL4186 | <i>yjbQ</i> | UPF0047 protein yjbQ | -1,05 | 1,12 | 1,38 |
| SL4187 | <i>yjbR</i> | Uncharacterized protein yjbR | -1,13 | 1,03 | 1,34 |
| SL4188 | - | Hypothetical | -1,09 | -1,20 | -1,77 |
| SL4189 | - | Lipoprotein | -1,08 | -1,17 | -1,87 |
| SL4190 | <i>uvrA</i> | UvrABC system protein A | 1,03 | -1,05 | 1,17 |
| SL4191 | - | Cytoplasmic Protein | -1,16 | 1,03 | -2,80 |
| SL4192 | <i>ssb</i> | Single-stranded DNA-binding protein | 1,12 | 1,21 | 1,12 |
| SL4193 | - | Hypothetical | -2,30 | -1,86 | -26,54 |
| SL4194 | - | Integral Membrane Protein | -2,14 | -1,76 | -26,23 |
| SL4195 | <i>tolC</i> | Outer membrane protein tolC | -2,10 | -1,38 | -22,66 |
| SL4196 | <i>prtE</i> | Proteases secretion protein prtE | -1,96 | -1,42 | -31,87 |
| SL4197 | - | Hypothetical | -1,31 | 1,08 | -18,80 |
| SL4198 | <i>IktB</i> | Leukotoxin translocation ATP-binding protein IktB | -2,25 | -1,23 | -46,89 |
| SL4199 | <i>yjcB</i> | Uncharacterized protein yjcB | -1,49 | 1,15 | -9,86 |
| SL4200 | <i>yjcC</i> | Uncharacterized protein yjcC | -1,93 | 1,10 | -3,42 |
| SL4201 | <i>soxS</i> | Regulatory protein soxS | -1,57 | -1,10 | -3,63 |
| SL4202 | <i>soxR</i> | Redox-sensitive transcriptional activator soxR | -1,46 | 1,07 | -1,86 |
| SL4203 | <i>yfcG</i> | Glutathione S-Transferase | -1,02 | 1,15 | 1,19 |
| SL4204 | <i>yjcD</i> | Putative permease yjcD | -1,08 | 1,19 | -1,70 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL4205 | <i>yjcE</i> | Uncharacterized Na(+)/H(+) exchanger <i>yjcE</i> | -1,16 | -1,16 | -1,01 |
| SL4206 | <i>ywlI</i> | Uncharacterized HTH-type transcriptional regulator <i>ywlI</i> | 1,14 | 1,30 | 1,69 |
| SL4207 | <i>cidA</i> | Holin-like protein <i>cidA</i> | -1,10 | -1,01 | -19,38 |
| SL4208 | <i>ywbG</i> | Uncharacterized protein <i>ywbG</i> | -1,18 | -1,29 | -19,43 |
| SL4209 | <i>actP</i> | Cation/acetate symporter <i>ActP</i> | -1,02 | -1,45 | 13,02 |
| SL4210 | <i>yjcH</i> | Inner membrane protein <i>yjcH</i> | 1,08 | -1,46 | 39,97 |
| SL4211 | <i>acs</i> | Acetyl-coenzyme A synthetase | -1,26 | -1,40 | 21,68 |
| SL4212 | - | Hypothetical | -1,04 | 1,03 | 3,32 |
| SL4213 | <i>nrfA</i> | Cytochrome c-552 | 1,17 | 1,40 | 2,13 |
| SL4214 | <i>nrfB</i> | Cytochrome c-type protein <i>nrfB</i> | -1,22 | 1,05 | -1,02 |
| SL4215 | <i>nrfC</i> | Protein <i>nrfC</i> | -1,24 | -1,09 | 1,02 |
| SL4216 | <i>nrfD</i> | Protein <i>nrfD</i> | -1,03 | -1,05 | 1,25 |
| SL4217 | <i>nrfE</i> | Cytochrome c-type biogenesis protein <i>nrfE</i> | 1,29 | -1,04 | -1,23 |
| SL4218 | <i>nrfG</i> | Formate-dependent nitrite reductase complex subunit <i>nrfG</i> | -1,07 | -1,30 | 1,15 |
| SL4219 | <i>gltP</i> | Proton glutamate symport protein | 1,19 | -1,33 | 1,90 |
| SL4220 | <i>yjcO</i> | Uncharacterized protein <i>yjcO</i> | 1,19 | -1,20 | -1,21 |
| SL4221 | <i>fdhF</i> | Formate dehydrogenase H | 1,16 | 1,06 | -2,29 |
| SL4222 | <i>fdhF</i> | Formate dehydrogenase H | 1,09 | 1,13 | -1,41 |
| SL4223 | - | Aspartyl/Asparaginyl Beta-Hydroxylase | -1,30 | -1,13 | 1,36 |
| SL4224 | <i>phnO</i> | Protein <i>phnO</i> | -1,11 | 1,42 | -1,27 |
| SL4225 | <i>phnB</i> | Protein <i>phnB</i> | -1,31 | 1,07 | 1,45 |
| SL4226 | <i>phnA</i> | Protein <i>phnA</i> | -1,16 | -1,10 | -1,36 |
| SL4227 | <i>proP</i> | Proline/betaine transporter | 1,16 | 1,04 | -1,52 |
| SL4228 | <i>basS</i> | Sensor protein <i>BasS</i> | -1,09 | 1,01 | 1,26 |
| SL4229 | <i>basR</i> | Transcriptional regulatory protein <i>BasR</i> | -1,05 | 1,01 | 1,31 |
| SL4230 | <i>eptA</i> | Phosphoethanolamine transferase <i>eptA</i> | -1,20 | -1,09 | -1,50 |
| SL4231 | <i>adiC</i> | Arginine/agmatine antiporter | -1,10 | -1,77 | -4,64 |
| SL4232 | <i>adiY</i> | HTH-type transcriptional regulator <i>AdiY</i> | -1,09 | -1,40 | -1,87 |
| SL4233 | <i>adiA</i> | Biodegradative arginine decarboxylase | -1,06 | -1,33 | -1,43 |
| SL4234 | <i>melR</i> | Melibiose operon regulatory protein | 1,19 | 1,12 | 6,19 |
| SL4235 | <i>melA</i> | Alpha-galactosidase | 1,88 | -1,50 | 1,48 |
| SL4236 | <i>melB</i> | Melibiose carrier protein | 2,07 | -1,79 | 1,46 |
| SL4237 | <i>fumB</i> | Fumarate hydratase class I, anaerobic | 1,18 | -1,01 | -1,84 |
| SL4238 | <i>dcuB</i> | Anaerobic C4-dicarboxylate transporter <i>dcuB</i> | 1,02 | 1,56 | -11,02 |
| SL4239 | - | Hypothetical | -1,18 | 1,39 | -24,27 |
| SL4240 | <i>dcuR</i> | Transcriptional regulatory protein <i>dcuR</i> | -1,14 | 1,03 | -1,93 |
| SL4241 | <i>dcuS</i> | Sensor protein <i>dcuS</i> | -1,01 | 1,10 | -1,12 |
| SL4242 | <i>dmsA</i> | Anaerobic dimethyl sulfoxide reductase chain A | 1,26 | 1,22 | 1,35 |
| SL4243 | <i>dmsB</i> | Anaerobic dimethyl sulfoxide reductase chain B | 1,33 | 1,15 | -1,05 |
| SL4244 | <i>ynfH</i> | Anaerobic dimethyl sulfoxide reductase chain <i>ynfH</i> | 1,47 | 1,20 | -1,08 |
| SL4245 | <i>dmsD</i> | Twin-arginine leader-binding protein <i>dmsD</i> | 1,43 | 1,15 | -1,43 |
| SL4246 | - | Hypothetical | 1,06 | -1,04 | -1,13 |
| SL4247 | <i>yjiK</i> | Uncharacterized protein <i>yjiK</i> | -1,74 | 1,10 | -24,46 |
| SL4248 | - | Hypothetical | -2,43 | -1,91 | -28,20 |
| SL4249 | - | Cytoplasmic Protein | -3,07 | -2,48 | -41,36 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL4250 | <i>yjjQ</i> | GerE Family Regulatory Protein | -3,14 | -2,47 | -60,33 |
| SL4251 | <i>sirC</i> | Transcriptional regulator sirC | -2,64 | -1,89 | -47,96 |
| SL4252 | - | Hypothetical | -1,52 | 1,12 | -5,47 |
| SL4253 | - | Hypothetical | -1,44 | 1,09 | -2,43 |
| SL4254 | - | GCN5-Related N-Acetyltransferase | -1,27 | -1,09 | -1,07 |
| SL4255 | <i>phoN</i> | Non-specific acid phosphatase | -1,91 | 1,07 | -1,76 |
| SL4256 | - | Ail And OmpX Homolog | 1,07 | 1,11 | 1,05 |
| SL4257 | - | Hypothetical | 1,04 | 1,05 | 1,55 |
| SL4258 | <i>ybbI</i> | Transcriptional Regulator MerR Family | 1,17 | 1,28 | -1,49 |
| SL4259 | <i>yjdC</i> | HTH-type transcriptional regulator yjdC | -1,06 | -1,07 | -1,27 |
| SL4260 | <i>dsbD</i> | Thiol:disulfide interchange protein dsbD | -1,04 | -1,45 | -2,77 |
| SL4261 | <i>cutA</i> | Divalent-cation tolerance protein cutA | -1,04 | -1,19 | -2,17 |
| SL4262 | <i>dcuA</i> | Anaerobic C4-dicarboxylate transporter dcuA | 1,09 | 1,16 | -1,12 |
| SL4263 | <i>aspA</i> | Aspartate ammonia-lyase | 1,15 | 1,12 | 1,10 |
| SL4264 | <i>fxsA</i> | UPF0716 protein fxsA | 1,17 | 1,56 | 1,15 |
| SL4265 | <i>yjeH</i> | Inner membrane protein yjeH | 1,13 | 1,35 | -1,28 |
| SL4266 | <i>groS</i> | 10 kDa chaperonin | 1,19 | 1,04 | 3,79 |
| SL4267 | <i>groL</i> | 60 kDa chaperonin | 1,17 | -1,02 | 2,58 |
| SL4268 | <i>yjeI</i> | Uncharacterized protein yjeI | 1,21 | 1,13 | 1,63 |
| SL4269 | <i>yjeJ</i> | Uncharacterized protein yjeJ | 1,15 | 1,14 | -1,60 |
| SL4270 | <i>yjeK</i> | Uncharacterized KamA family protein YjeK | 1,08 | 1,01 | -2,15 |
| SL4271 | <i>efp</i> | Elongation factor P | -1,21 | -1,17 | -1,58 |
| SL4272 | <i>ecnA</i> | Entericidin A | -1,07 | -1,04 | -1,90 |
| SL4273 | <i>ecnB</i> | Entericidin B | 1,14 | 1,42 | 1,10 |
| SL4274 | <i>ecnR</i> | Transcriptional regulatory protein entR | 1,10 | -1,03 | 1,11 |
| SL4275 | <i>sugE</i> | Quaternary ammonium compound-resistance protein sugE | 1,26 | 1,09 | 1,17 |
| SL4276 | <i>blc</i> | Outer membrane lipoprotein blc | 1,12 | 1,12 | 1,48 |
| SL4277 | <i>frdD</i> | Fumarate reductase subunit D | 1,29 | 1,10 | 1,42 |
| SL4278 | <i>frdC</i> | Fumarate reductase subunit C | 1,27 | 1,02 | 1,31 |
| SL4279 | <i>frdB</i> | Fumarate reductase iron-sulfur subunit | 1,16 | -1,07 | 1,17 |
| SL4280 | <i>frdA</i> | Fumarate reductase flavoprotein subunit | 1,23 | 1,01 | 1,01 |
| SL4281 | <i>yjeA</i> | Uncharacterized protein YjeA | -1,18 | -1,30 | -2,31 |
| SL4282 | <i>yjeM</i> | Inner membrane transporter yjeM | -1,01 | -1,06 | -3,47 |
| SL4283 | <i>yjeO</i> | Inner membrane protein yjeO | 1,07 | -1,19 | -1,41 |
| SL4284 | <i>yjeP</i> | Uncharacterized mscS family protein yjeP | 1,03 | -1,03 | -1,04 |
| SL4285 | <i>psd</i> | Phosphatidylserine decarboxylase proenzyme | 1,06 | -1,08 | 1,10 |
| SL4286 | <i>rsgA</i> | Putative ribosome biogenesis GTPase RsgA | 1,02 | -1,14 | -1,44 |
| SL4287 | <i>orn</i> | Oligoribonuclease | 1,24 | -1,10 | 1,07 |
| SL4288 | <i>artJ</i> | ABC transporter arginine-binding protein 1 | -1,14 | -1,08 | 1,16 |
| SL4289 | <i>yjeS</i> | Putative electron transport protein yjeS | 1,02 | 1,05 | -1,37 |
| SL4290 | <i>yjeF</i> | Uncharacterized protein yjeF | 1,18 | 1,09 | 1,63 |
| SL4291 | <i>yjeE</i> | UPF0079 ATP-binding protein yjeE | -1,03 | 1,01 | 1,21 |
| SL4292 | <i>amiB</i> | N-acetylmuramoyl-L-alanine amidase AmiB | 1,06 | 1,09 | 1,16 |
| SL4293 | <i>mutL</i> | DNA mismatch repair protein mutL | 1,10 | 1,03 | 1,12 |
| SL4294 | <i>miaA</i> | tRNA dimethylallyltransferase | -1,06 | 1,01 | 1,15 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL4295 | <i>hfq</i> | Protein hfq | -1,03 | -1,05 | 1,14 |
| SL4296 | <i>hflX</i> | GTP-binding protein hflX | -1,01 | -1,10 | -1,06 |
| SL4297 | <i>hflK</i> | Protein hflK | -1,04 | -1,15 | -1,11 |
| SL4298 | <i>hflC</i> | Protein hflC | -1,06 | -1,18 | 1,03 |
| SL4299 | <i>purA</i> | Adenylosuccinate synthetase | -1,02 | 1,06 | -1,82 |
| SL4300 | <i>nsrR</i> | HTH-type transcriptional repressor nsrR | 1,06 | -1,04 | -1,32 |
| SL4301 | <i>rnr</i> | Ribonuclease R | 1,06 | -1,05 | 1,39 |
| SL4302 | <i>rImB</i> | 23S rRNA (guanosine-2'-O)-methyltransferase rImB | 1,24 | -1,15 | -1,15 |
| SL4303 | <i>yjfl</i> | Uncharacterized protein yjfl | 1,10 | 1,14 | 1,34 |
| SL4304 | <i>yjfJ</i> | Uncharacterized protein YjfJ | -1,06 | -1,06 | 1,23 |
| SL4305 | - | Resembles Potassium Channels | 1,02 | -1,33 | -1,00 |
| SL4306 | <i>yjfK</i> | Uncharacterized protein yjfK | -1,09 | -1,32 | -1,08 |
| SL4307 | <i>yjfL</i> | UPF0719 inner membrane protein yjfL | 1,14 | 1,09 | -1,51 |
| SL4308 | <i>yjfM</i> | Uncharacterized protein yjfM | 1,15 | 1,01 | -1,01 |
| SL4309 | <i>yjfC</i> | Uncharacterized protein yjfC | 1,11 | 1,01 | 1,18 |
| SL4310 | <i>aidB</i> | Protein AidB | 1,35 | 1,22 | 9,60 |
| SL4311 | <i>yjfN</i> | Uncharacterized protein yjfN | 1,41 | 1,24 | 6,64 |
| SL4312 | <i>bsmA</i> | Lipoprotein BsmA | 1,31 | 1,21 | 5,00 |
| SL4313 | <i>yjfP</i> | Esterase yjfP | 1,04 | 1,03 | 2,55 |
| SL4314 | <i>ulaR</i> | HTH-type transcriptional regulator ulaR | 1,06 | -1,12 | 1,59 |
| SL4315 | <i>ulaG</i> | Probable L-ascorbate-6-phosphate lactonase ulag | 1,10 | 1,15 | 2,27 |
| SL4316 | <i>ulaA</i> | Ascorbate-specific permease IIC component ulaa | 1,34 | 1,14 | 9,06 |
| SL4317 | <i>ulaB</i> | Ascorbate-specific phosphotransferase enzyme IIB component | 1,29 | 1,06 | 6,92 |
| SL4318 | <i>ulaC</i> | Ascorbate-specific phosphotransferase enzyme IIA component | 1,14 | -1,11 | 5,04 |
| SL4319 | <i>ulaD</i> | 3-keto-L-gulonate-6-phosphate decarboxylase ulad | 1,23 | -1,49 | 3,02 |
| SL4320 | <i>ulaE</i> | L-ribulose-5-phosphate 3-epimerase ulaE | 1,06 | -1,20 | 2,25 |
| SL4321 | <i>ulaF</i> | L-ribulose-5-phosphate 4-epimerase ulaF | 1,15 | -1,17 | 1,83 |
| SL4322 | <i>yjfY</i> | Uncharacterized protein yjfY | -1,07 | 1,32 | 1,19 |
| SL4323 | - | Hypothetical | -1,04 | 1,46 | -1,78 |
| SL4324 | <i>rpsF</i> | 30S ribosomal protein S6 | -1,05 | 1,10 | -1,18 |
| SL4325 | <i>priB</i> | Primosomal replication protein n | -1,01 | 1,08 | -1,19 |
| SL4326 | <i>rpsR</i> | 30S ribosomal protein S18 | -1,07 | 1,09 | -1,02 |
| SL4327 | <i>rplI</i> | 50S ribosomal protein L9 | -1,15 | 1,10 | -2,28 |
| SL4328 | <i>ydeD</i> | Hypothetical | 1,10 | -1,19 | -1,35 |
| SL4329 | <i>ytfB</i> | Uncharacterized protein ytfB | 1,24 | 1,19 | 2,09 |
| SL4330 | <i>fklB</i> | FKBP-type 22 kDa peptidyl-prolyl cis-trans isomerase | -1,24 | -1,10 | -1,74 |
| SL4331 | <i>cycA</i> | D-serine/D-alanine/glycine transporter | -1,18 | -1,15 | 1,35 |
| SL4332 | <i>ytfE</i> | Regulator of cell morphogenesis and NO signaling | 1,10 | -1,06 | 1,10 |
| SL4333 | <i>ytfF</i> | Inner membrane protein ytfF | 1,15 | 1,22 | 2,16 |
| SL4334 | <i>qorB</i> | Quinone oxidoreductase 2 | 1,06 | 1,26 | 2,70 |
| SL4335 | <i>ytfH</i> | Uncharacterized HTH-type transcriptional regulator ytfH | 1,48 | -1,03 | 1,53 |
| SL4336 | <i>cpdB</i> | 2',3'-cyclic-nucleotide 2'-phosphodiesterase/3'-nucleotidase | 1,31 | 1,04 | 4,00 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-----------------------|-----------------------|---------------------------|
| SL4337 | <i>cysQ</i> | 3'(2'),5'-bisphosphate nucleotidase cysQ | -1,02 | 1,00 | 2,40 |
| SL4338 | <i>ytfJ</i> | Uncharacterized protein ytfJ | -1,19 | 1,16 | 2,51 |
| SL4339 | <i>ytfK</i> | Uncharacterized protein ytfK | -1,34 | -1,01 | -1,39 |
| SL4340 | <i>ytfL</i> | UPF0053 inner membrane protein ytfL | -1,12 | -1,16 | -2,96 |
| SL4341 | <i>msrA</i> | Peptide methionine sulfoxide reductase msrA | -1,09 | 1,23 | 2,87 |
| SL4342 | <i>ytfM</i> | Uncharacterized protein ytfM | 1,10 | 1,05 | 1,13 |
| SL4343 | <i>ytfN</i> | Uncharacterized protein ytfN | 1,12 | -1,02 | 1,29 |
| SL4344 | <i>ytfP</i> | Gamma-glutamylcyclotransferase family protein ytfP | 1,04 | -1,06 | -1,02 |
| SL4345 | <i>dgoT</i> | D-galactonate transporter | 1,08 | -1,01 | -1,16 |
| SL4346 | - | Dihydroorotate | -1,26 | -1,06 | 1,08 |
| SL4347 | <i>ppa</i> | Inorganic pyrophosphatase | 1,01 | -1,10 | -1,03 |
| SL4348 | <i>fbp</i> | Fructose-1,6-bisphosphatase class 1 | 1,02 | 1,02 | 1,65 |
| SL4349 | <i>mpl</i> | UDP-N-acetylmuramate:L-alanyl-gamma-D-glutamyl-meso-diaminopimelate ligase | -1,08 | -1,13 | -1,53 |
| SL4350 | <i>hexR</i> | Uncharacterized HTH-type transcriptional regulator HI_0143 | -1,08 | 1,02 | -2,14 |
| SL4351 | <i>xyIE</i> | D-xylose-proton symporter | 1,00 | -1,60 | 7,99 |
| SL4352 | <i>xyIE</i> | D-xylose-proton symporter | 1,12 | 1,12 | 2,71 |
| SL4353 | <i>iolB</i> | 5-deoxy-glucuronate isomerase | 1,33 | 1,06 | 3,00 |
| SL4354 | <i>iolA1</i> | Methylmalonate semialdehyde dehydrogenase [acylating] 1 | 1,29 | 1,10 | 3,93 |
| SL4355 | <i>ydiP</i> | Uncharacterized HTH-type transcriptional regulator ydiP | 1,09 | 1,48 | 6,37 |
| SL4356 | <i>iolE</i> | Inosose dehydratase | 1,14 | 1,10 | 1,85 |
| SL4357 | <i>iolG</i> | Inositol 2-dehydrogenase | 1,01 | 1,06 | 1,65 |
| SL4358 | - | Glucan Endo-1 6-Beta-Glucosidase | -1,01 | 1,13 | 1,05 |
| SL4359 | <i>iolI</i> | Inosose isomerase | 1,20 | -1,01 | 2,12 |
| SL4360 | <i>yfcJ</i> | UPF0226 protein STM4428 | -1,00 | -1,20 | 1,54 |
| SL4361 | <i>iolC</i> | 5-dehydro-2-deoxygluconokinase | 1,02 | -1,26 | 5,41 |
| SL4362 | <i>iolD1</i> | 3D-(3,5/4)-trihydroxycyclohexane-1,2-dione hydrolase 1 | 1,04 | -1,38 | 5,81 |
| SL4363 | <i>yrbE</i> | Uncharacterized oxidoreductase yrbE | 1,39 | 1,20 | 1,51 |
| SL4364 | <i>csbX</i> | Alpha-ketoglutarate permease | -1,08 | -1,49 | 1,78 |
| SL4365 | - | Xylose Isomerase Domain-Containing Protein | 1,03 | -1,04 | 2,81 |
| SL4366 | <i>iolH</i> | Protein iolH | 1,00 | -1,15 | 2,02 |
| SL4367 | <i>yigA</i> | UPF0307 protein CKO_03595 | 1,03 | 1,14 | 1,12 |
| SL4368 | <i>pmbA</i> | Protein pmbA | 1,15 | 1,11 | 1,63 |
| SL4369 | <i>cybC</i> | Soluble cytochrome b562 | 1,05 | 1,04 | 2,03 |
| SL4370 | - | Hypothetical | 1,33 | 1,33 | 1,44 |
| SL4371 | - | Hypothetical | 1,37 | 1,18 | 2,22 |
| SL4372 | - | Hypothetical | 1,39 | 1,09 | 2,71 |
| SL4373 | - | Hypothetical | 1,09 | 1,02 | 2,64 |
| SL4374 | - | Hypothetical | 1,13 | 1,07 | 2,36 |
| SL4375 | - | Dihydroorotate | 1,22 | -1,08 | 2,21 |
| SL4376 | <i>selA</i> | Uncharacterized protein mlr3804 | 1,21 | 1,00 | 2,54 |
| SL4377 | - | Hypothetical | 1,23 | -1,01 | 2,59 |
| SL4378 | <i>licR</i> | Probable licABCH operon regulator | 1,21 | -1,02 | 1,93 |
| SL4379 | <i>relB</i> | Antitoxin RelB | 1,21 | -1,08 | 1,73 |
| SL4380 | <i>relE</i> | Toxin relE | 1,29 | -1,05 | 1,90 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-------------------|-------------------|-----------------------|
| SL4381 | <i>nrdG</i> | Anaerobic ribonucleoside-triphosphate reductase-activating protein | 1,27 | -1,20 | -2,24 |
| SL4382 | <i>nrdD</i> | Anaerobic ribonucleoside-triphosphate reductase | 1,27 | -1,05 | -2,21 |
| SL4383 | - | Hypothetical | -1,17 | -1,08 | -1,04 |
| SL4384 | <i>treC</i> | Trehalose-6-phosphate hydrolase | -1,16 | 1,06 | 2,06 |
| SL4385 | <i>treB</i> | PTS system trehalose-specific EIIBC component | 1,06 | 1,34 | 2,48 |
| SL4386 | <i>treR</i> | HTH-type transcriptional regulator treR | 1,14 | 1,13 | -1,37 |
| SL4387 | <i>mgtA</i> | Magnesium-transporting ATPase, P-type 1 | -1,61 | 1,04 | -2,08 |
| SL4388 | - | Conserved Hypothetical Protein | -1,13 | 1,10 | 1,27 |
| SL4389 | <i>yjgF</i> | UPF0076 protein yjgF | 1,14 | 1,10 | 1,61 |
| SL4390 | <i>pyrl</i> | Aspartate carbamoyltransferase regulatory chain | -1,03 | 1,14 | 1,05 |
| SL4391 | <i>pyrB</i> | Aspartate carbamoyltransferase | -1,10 | 1,18 | -1,15 |
| SL4392 | <i>pyrL</i> | PyrBI operon leader peptide | 1,52 | 1,01 | -1,50 |
| SL4393 | <i>argR</i> | Arginine repressor | 2,49 | 1,35 | -1,35 |
| SL4394 | <i>yfcC</i> | Uncharacterized protein HI_0594 | 2,59 | 1,62 | -1,71 |
| SL4395 | <i>arcB</i> | Ornithine carbamoyltransferase, catabolic | 2,46 | 1,57 | -1,54 |
| SL4396 | <i>arcC</i> | Carbamate kinase | 2,65 | 1,92 | -1,01 |
| SL4397 | <i>arcA</i> | Arginine deiminase | 2,65 | 2,16 | 1,41 |
| SL4398 | <i>yjgK</i> | Uncharacterized protein yjgK | -1,06 | 1,23 | 1,78 |
| SL4399 | <i>argI</i> | Ornithine carbamoyltransferase | -1,00 | -1,08 | 1,10 |
| SL4400 | <i>yjgD</i> | Uncharacterized protein yjgD | 1,08 | 1,05 | 1,16 |
| SL4401 | <i>miaE</i> | tRNA-(ms[2]io[6]A)-hydroxylase | 1,03 | -1,17 | 1,05 |
| SL4402 | <i>ytgA</i> | Uncharacterized protein ytgA | 1,31 | -1,20 | 2,30 |
| SL4403 | <i>yjgM</i> | Uncharacterized N-acetyltransferase yjgM | 1,34 | 1,16 | 1,19 |
| SL4404 | <i>yjgN</i> | Inner membrane protein yjgN | 1,05 | 1,18 | 1,02 |
| SL4405 | <i>valS</i> | Valyl-tRNA synthetase | 1,17 | -1,07 | 1,33 |
| SL4406 | <i>holC</i> | DNA polymerase III subunit chi | 1,13 | -1,20 | 2,20 |
| SL4407 | <i>pepA</i> | Probable cytosol aminopeptidase | 1,17 | -1,08 | 2,78 |
| SL4408 | - | Cytoplasmic Protein | -1,15 | -1,33 | 1,45 |
| SL4409 | <i>iptF</i> | Lipopolysaccharide export system permease protein IptF | 1,08 | 1,01 | -1,52 |
| SL4410 | <i>iptG</i> | Lipopolysaccharide export system permease protein IptG | 1,05 | -1,05 | -1,23 |
| SL4411 | <i>idnR</i> | HTH-type transcriptional regulator idnR | 1,35 | 1,01 | 1,64 |
| SL4412 | <i>idnT</i> | Gnt-II system L-idonate transporter | 1,58 | -1,02 | 3,38 |
| SL4413 | <i>idnO</i> | Gluconate 5-dehydrogenase | 1,50 | -1,24 | 3,80 |
| SL4414 | <i>idnD</i> | L-idonate 5-dehydrogenase | 1,71 | -1,04 | 4,59 |
| SL4415 | <i>idnK</i> | Thermosensitive gluconokinase | 1,14 | 1,03 | 2,28 |
| SL4416 | <i>yjgB</i> | Uncharacterized zinc-type alcohol dehydrogenase-like protein yjgB | -1,01 | -1,02 | 1,77 |
| SL4417 | <i>intZ</i> | Integrase Family Protein | 1,11 | 1,09 | -1,17 |
| SL4418 | <i>yjhR</i> | Putative uncharacterized protein yjhR | 1,07 | -1,02 | 1,78 |
| SL4419 | - | Restriction Endonuclease | 1,20 | 1,05 | 2,21 |
| SL4420 | <i>lon</i> | Hypothetical | 1,23 | 1,12 | 1,32 |
| SL4421 | - | Hypothetical | 1,14 | 1,07 | -1,10 |
| SL4422 | - | Hypothetical | -1,11 | -1,18 | -1,06 |
| SL4423 | - | ABC-Type Transporter | -1,08 | -1,02 | -1,07 |
| SL4424 | - | Hypothetical | -1,19 | -1,21 | 1,38 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL4425 | - | Hypothetical | 1,20 | -1,00 | 1,64 |
| SL4426 | - | Hypothetical | -1,10 | -1,06 | -1,78 |
| SL4427 | - | Hypothetical | -1,18 | -1,09 | -1,76 |
| SL4428 | - | Molybdopterin-Guanine Dinucleotide Biosynthesis Protein A | 1,14 | 1,05 | -1,32 |
| SL4429 | <i>yeeN</i> | UPF0082 protein LACR_0237 | 1,08 | -1,07 | -2,10 |
| SL4430 | <i>yjhP</i> | Uncharacterized protein <i>yjhP</i> | 1,27 | 1,18 | 2,26 |
| SL4431 | - | UPF0386 protein KPN78578_02510 | 1,35 | 1,24 | 2,78 |
| SL4432 | - | Hypothetical | 1,23 | -1,30 | 1,88 |
| SL4433 | - | Hypothetical | 1,01 | -1,05 | 1,27 |
| SL4434 | - | Hypothetical | -2,10 | 1,20 | -4,98 |
| SL4435 | - | Hypothetical | -1,43 | 1,10 | -2,04 |
| SL4436 | <i>yczH</i> | Uncharacterized protein <i>yczH</i> | -1,08 | 1,14 | -1,14 |
| SL4437 | <i>uxuR</i> | Uxu operon transcriptional regulator | 1,16 | 1,14 | 1,19 |
| SL4438 | <i>trpS</i> | Tryptophanyl-tRNA synthetase | -1,02 | -1,11 | 2,21 |
| SL4439 | - | Hypothetical | 1,24 | 1,06 | 1,14 |
| SL4440 | - | Hypothetical | -1,08 | 1,06 | -1,25 |
| SL4441 | <i>ygeA</i> | Uncharacterized protein in pnIA 3'region | 1,23 | 1,02 | 1,24 |
| SL4442 | <i>yjiE</i> | Uncharacterized HTH-type transcriptional regulator <i>yjiE</i> | 1,02 | -1,47 | -1,51 |
| SL4443 | <i>iadA</i> | Isoaspartyl dipeptidase | -1,05 | -1,05 | -1,36 |
| SL4444 | <i>yjiG</i> | Inner membrane protein <i>yjiG</i> | -1,18 | -1,18 | -1,21 |
| SL4445 | <i>yjiH</i> | Uncharacterized protein <i>yjiH</i> | -1,15 | -1,14 | -1,23 |
| SL4446 | <i>yjiJ</i> | Uncharacterized protein <i>yjiJ</i> | -1,01 | 1,15 | -1,48 |
| SL4447 | <i>yjiN</i> | Uncharacterized protein <i>yjiN</i> | -1,02 | 1,01 | -1,08 |
| SL4448 | <i>mdtM</i> | Multidrug resistance protein <i>mdtM</i> | 1,16 | 1,17 | -1,50 |
| SL4449 | <i>yfcl</i> | Uncharacterized protein <i>yfcl</i> | -1,00 | -1,12 | 1,52 |
| SL4450 | <i>ssdA</i> | Succinate-semialdehyde dehydrogenase [NADP+] | 1,49 | 1,45 | 2,77 |
| SL4451 | - | Hypothetical | 1,32 | -1,32 | 2,30 |
| SL4452 | <i>yjiS</i> | Hypothetical | 1,19 | 1,14 | 1,25 |
| SL4453 | - | Hypothetical | 1,00 | -1,48 | 1,01 |
| SL4454 | <i>symE</i> | Endoribonuclease <i>symE</i> | 1,23 | 1,19 | 1,72 |
| SL4455 | <i>hsdS</i> | Type-1 restriction enzyme StySJI specificity protein | -1,21 | -1,46 | 1,35 |
| SL4456 | <i>hsdM</i> | Type I restriction enzyme EcoKI M protein | 1,01 | -1,00 | 1,28 |
| SL4457 | <i>hsdR</i> | Type I restriction enzyme EcoKI R protein | 1,09 | 1,02 | 2,34 |
| SL4458 | <i>mrr</i> | Mrr restriction system protein | 1,03 | -1,00 | 1,62 |
| SL4459 | - | Hypothetical | 1,29 | 1,33 | 2,48 |
| SL4460 | - | Hypothetical | 1,26 | 1,49 | 3,02 |
| SL4461 | <i>yjiA</i> | Uncharacterized GTP-binding protein <i>yjiA</i> | 1,13 | -1,10 | -1,01 |
| SL4462 | <i>yjiX</i> | Uncharacterized protein <i>yjiX</i> | -1,09 | -1,08 | -2,97 |
| SL4463 | <i>yjiY</i> | Inner membrane protein <i>yjiY</i> | 1,11 | 1,19 | -18,87 |
| SL4464 | <i>tsr</i> | Methyl-accepting chemotaxis protein I | -1,03 | -1,00 | -2,50 |
| SL4465 | <i>levR</i> | Transcriptional regulatory protein <i>levR</i> | 1,19 | 1,17 | 1,99 |
| SL4466 | <i>manX</i> | PTS System Fructocific IIA Component | 2,51 | 1,25 | 13,66 |
| SL4467 | <i>manX</i> | Probable phosphotransferase enzyme IIB component M6_Spy0801 | 1,80 | -1,22 | 15,83 |
| SL4468 | <i>agaC</i> | N-acetylgalactosamine permease IIC component 1 | 2,23 | -1,04 | 17,29 |
| SL4469 | <i>manZ</i> | Mannose permease IID component | 2,24 | 1,09 | 14,20 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-------------------|-------------------|-----------------------|
| SL4470 | <i>glmS</i> | Glucosamine-fructose-6-phosphate aminotransferase [isomerizing] | 3,29 | 1,02 | 23,21 |
| SL4471 | <i>frlB</i> | Fructosamine deglycase frlB | 2,57 | 1,34 | 14,58 |
| SL4472 | <i>mdoB</i> | Phosphoglycerol transferase I | -1,11 | 1,10 | -1,77 |
| SL4473 | <i>yjjA</i> | Uncharacterized protein yjjA | 1,05 | 1,00 | 1,04 |
| SL4474 | <i>dnaC</i> | DNA replication protein dnaC | 1,14 | 1,15 | 1,14 |
| SL4475 | <i>dnaT</i> | Primosomal protein 1 | 1,18 | 1,09 | -1,13 |
| SL4476 | <i>yjjB</i> | UPF0442 protein CKO_03436 | 1,21 | 1,11 | -1,14 |
| SL4477 | <i>yjjP</i> | Inner membrane protein yjjP | 1,09 | 1,20 | -1,52 |
| SL4478 | <i>yjjQ</i> | Uncharacterized protein yjjQ | 1,09 | -1,10 | -1,06 |
| SL4479 | <i>bgIJ</i> | Transcriptional activator protein BglJ | 1,07 | 1,19 | 1,30 |
| SL4480 | <i>ywhH</i> | Uncharacterized protein ywhH | 1,03 | -1,01 | 1,39 |
| SL4481 | <i>fhuF</i> | Ferric iron reductase protein fhuF | -1,00 | 1,47 | -1,23 |
| SL4482 | <i>ycdT</i> | Inner membrane protein ycdT | 1,19 | 1,00 | -1,60 |
| SL4483 | <i>yjjZ</i> | Uncharacterized protein yjjZ | 1,27 | 1,39 | -1,41 |
| SL4484 | <i>rsmC</i> | Ribosomal RNA small subunit methyltransferase C | 1,03 | -1,07 | -2,63 |
| SL4485 | <i>holD</i> | DNA polymerase III subunit psi | 1,17 | 1,00 | -1,63 |
| SL4486 | <i>rimI</i> | Ribosomal-protein-alanine acetyltransferase | 1,14 | -1,06 | -1,63 |
| SL4487 | <i>yjjG</i> | 5'-nucleotidase yjjG | 1,20 | -1,04 | -1,72 |
| SL4488 | <i>prfC</i> | Peptide chain release factor 3 | 1,24 | -1,03 | -1,48 |
| SL4489 | <i>osmY</i> | Osmotically-inducible protein Y | -1,01 | 1,05 | 1,32 |
| SL4490 | <i>yjjU</i> | Uncharacterized protein yjjU | 1,01 | -1,15 | -1,16 |
| SL4491 | <i>yjjV</i> | Uncharacterized deoxyribonuclease yjjV | 1,11 | -1,21 | -1,06 |
| SL4492 | <i>yjjW</i> | Uncharacterized protein yjjW | 1,36 | -1,05 | 1,57 |
| SL4493 | <i>yjil</i> | Uncharacterized protein yjil | 1,25 | 1,08 | 1,64 |
| SL4494 | <i>deoC</i> | Deoxyribose-phosphate aldolase | 1,13 | 1,21 | -1,06 |
| SL4495 | <i>deoA</i> | Thymidine phosphorylase | 1,25 | 1,01 | 1,17 |
| SL4496 | <i>deoB</i> | Phosphopentomutase | -1,09 | -1,00 | -2,17 |
| SL4497 | <i>deoD</i> | Purine nucleoside phosphorylase deoD-type | -1,03 | 1,03 | -1,71 |
| SL4498 | - | Hypothetical | 1,14 | 1,15 | -1,84 |
| SL4499 | <i>yhcD</i> | Uncharacterized outer membrane usher protein yhcD | 1,16 | 1,10 | -1,23 |
| SL4500 | <i>yhcA</i> | Uncharacterized fimbrial chaperone yhcA | -1,65 | -1,01 | -1,99 |
| SL4501 | <i>yhcF</i> | Uncharacterized protein yhcF | -1,19 | -1,05 | -1,12 |
| SL4502 | <i>yhcF</i> | Uncharacterized protein yhcF | -1,04 | 1,05 | 1,30 |
| SL4503 | <i>lplA</i> | Lipoate-protein ligase A | 1,08 | 1,08 | 1,37 |
| SL4504 | <i>smp</i> | Protein smp | 1,03 | 1,18 | -1,38 |
| SL4505 | <i>serB</i> | Phosphoserine phosphatase | -1,05 | -1,07 | -1,08 |
| SL4506 | <i>radA</i> | DNA repair protein radA | 1,16 | -1,11 | 1,24 |
| SL4507 | <i>nadR</i> | Transcriptional regulator nadR | 1,31 | 1,10 | 1,59 |
| SL4508 | <i>yjjK</i> | Uncharacterized ABC transporter ATP-binding protein yjjK | 1,04 | -1,18 | 1,54 |
| SL4509 | <i>slt</i> | Soluble lytic murein transglycosylase | 1,26 | -1,04 | 2,00 |
| SL4510 | <i>trpR</i> | Trp operon repressor | 1,10 | -1,25 | 2,05 |
| SL4511 | <i>yjjX</i> | UPF0244 protein yjjX | 1,01 | -1,12 | -1,16 |
| SL4512 | <i>gpmB</i> | Probable phosphoglycerate mutase gpmB | -1,08 | -1,00 | -1,44 |
| SL4513 | <i>rob</i> | Right origin-binding protein | 1,14 | 1,05 | -1,09 |
| SL4514 | <i>creA</i> | Protein creA | -1,02 | -1,00 | 1,42 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL4515 | <i>creB</i> | Transcriptional regulatory protein creB | 1,16 | -1,05 | 1,27 |
| SL4516 | <i>creC</i> | Sensor protein creC | 1,16 | -1,11 | -1,09 |
| SL4517 | <i>creD</i> | Inner membrane protein creD | 1,15 | 1,14 | 1,43 |
| SL4518 | - | Adhesin | 1,13 | -1,12 | -1,05 |
| SL4519 | <i>fimG</i> | Hypothetical | 1,11 | 1,29 | -1,21 |
| SL4520 | <i>lpfC</i> | Outer membrane usher protein lpfC | -1,14 | 1,09 | 1,09 |
| SL4521 | <i>fimC</i> | Chaperone protein fimC | -1,08 | 1,03 | -1,14 |
| SL4522 | <i>ydeS</i> | Uncharacterized fimbrial-like protein ydeS | -1,01 | -1,27 | 1,08 |
| SL4523 | <i>yaiV</i> | Uncharacterized protein yaiV | 1,04 | 1,03 | 1,18 |
| SL4524 | - | Hypothetical | 1,46 | 1,20 | -1,49 |
| SL4525 | <i>arcA</i> | Aerobic respiration control protein ArcA | -1,03 | -1,02 | -1,27 |
| SL4526 | <i>yjjY</i> | Uncharacterized protein yjjY | 1,03 | 1,04 | -1,07 |
| SL4527 | <i>lasT</i> | Uncharacterized tRNA/rRNA methyltransferase lasT | -1,01 | -1,05 | -1,02 |
| SLP1_0001 | <i>finO</i> | Fertility inhibition protein | 1,13 | -1,03 | 1,63 |
| SLP1_0002 | <i>traX</i> | Protein traX | 1,33 | -1,05 | 1,08 |
| SLP1_0003 | <i>traI</i> | Protein traI | 1,12 | 1,04 | -1,00 |
| SLP1_0004 | <i>trbH</i> | Protein trbH | 1,32 | -1,04 | 1,18 |
| SLP1_0005 | - | Uncharacterized protein CP0246 | 1,55 | 1,23 | 1,63 |
| SLP1_0006 | - | Uncharacterized protein HI_0947 | 1,32 | 1,09 | 1,42 |
| SLP1_0007 | <i>traD</i> | Protein traD | 1,23 | -1,03 | -1,08 |
| SLP1_0008 | <i>traT</i> | TraT complement resistance protein | 1,02 | -1,06 | 1,22 |
| SLP1_0009 | - | Surface Exclusion Inner Membrane Protein TraS | -1,02 | 1,07 | 1,52 |
| SLP1_0010 | <i>traG</i> | Protein traG | 1,08 | 1,03 | 1,65 |
| SLP1_0011 | <i>traH</i> | Protein traH | 1,04 | -1,15 | 1,93 |
| SLP1_0012 | <i>trbB</i> | Protein trbB | -1,03 | -1,11 | 1,88 |
| SLP1_0013 | <i>traQ</i> | Protein traQ | 1,07 | -1,04 | 2,12 |
| SLP1_0014 | <i>traF</i> | Protein traF | 1,16 | 1,02 | 1,57 |
| SLP1_0015 | <i>trbE</i> | Conjugative Transfer Protein | 1,35 | 1,20 | 1,57 |
| SLP1_0016 | <i>traN</i> | Protein traN | 1,12 | -1,00 | 1,43 |
| SLP1_0017 | <i>trbC</i> | Periplasmic protein trbC | 1,14 | -1,03 | 1,34 |
| SLP1_0018 | - | Conjugative Transfer Protein | 1,17 | -1,00 | 1,19 |
| SLP1_0019 | <i>traU</i> | Protein traU | 1,36 | 1,08 | 1,75 |
| SLP1_0020 | <i>traW</i> | Protein traW | 1,25 | 1,02 | 1,70 |
| SLP1_0021 | <i>trbl</i> | Protein trbl | 1,07 | -1,21 | 1,91 |
| SLP1_0022 | <i>traC</i> | Protein traC | 1,31 | -1,11 | 2,12 |
| SLP1_0023 | - | Conjugative Transfer | 1,16 | -1,40 | 1,62 |
| SLP1_0024 | <i>traR</i> | Protein TraR | 1,25 | -1,14 | 1,96 |
| SLP1_0025 | <i>traV</i> | Protein TraV | 1,03 | -1,17 | 2,31 |
| SLP1_0026 | <i>trbD</i> | Conjugal Transfer Protein TrbD | 1,16 | 1,24 | 2,84 |
| SLP1_0027 | <i>traP</i> | Protein traP | 1,25 | 1,23 | 1,36 |
| SLP1_0028 | <i>traB</i> | Protein traB | 1,11 | -1,17 | 1,54 |
| SLP1_0029 | <i>traK</i> | TraK lipoprotein | 1,28 | 1,07 | 1,39 |
| SLP1_0030 | <i>traE</i> | Protein traE | 1,30 | -1,03 | -1,55 |
| SLP1_0031 | <i>traL</i> | Protein traL | 1,45 | -1,19 | -1,36 |
| SLP1_0032 | <i>traA</i> | Pilin | 1,94 | 1,28 | 1,53 |
| SLP1_0033 | <i>traY</i> | Protein traY | 1,64 | 1,27 | 1,20 |
| SLP1_0034 | <i>traJ</i> | Protein traJ | 1,09 | 1,03 | 1,13 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SLP1_0035 | <i>traM</i> | Protein traM | 1,13 | 1,08 | 1,57 |
| SLP1_0036 | X | X polypeptide | -1,13 | 1,03 | 1,02 |
| SLP1_0037 | <i>psiA</i> | Protein psiA | -1,06 | 1,04 | 1,84 |
| SLP1_0038 | <i>psiB</i> | Protein psiB | 1,15 | 1,22 | 1,74 |
| SLP1_0039 | <i>yubM</i> | Uncharacterized protein yubM | -1,01 | -1,02 | 2,75 |
| SLP1_0040 | <i>yubL</i> | UPF0401 protein yubL | 1,02 | -1,14 | 1,20 |
| SLP1_0041 | <i>ssb2</i> | Single-stranded DNA-binding protein 2 | 1,07 | 1,13 | 1,62 |
| SLP1_0042 | <i>holE</i> | DNA polymerase III subunit theta | 1,22 | 1,14 | -1,46 |
| SLP1_0043 | - | Hypothetical | 1,34 | 1,21 | 2,35 |
| SLP1_0044 | <i>yubI</i> | Putative antirestriction protein YubI | -1,04 | -1,01 | 1,50 |
| SLP1_0045 | - | Uncharacterized protein yubG | 1,05 | 1,33 | 1,62 |
| SLP1_0047 | - | Hypothetical | 1,20 | 1,34 | 1,85 |
| SLP1_0048 | <i>yubE</i> | Uncharacterized protein YubE | 1,05 | 1,21 | 1,26 |
| SLP1_0049 | <i>yubD</i> | Putative methylase yubD | -1,13 | -1,14 | -1,03 |
| SLP1_0050 | - | Cytoplasmic Protein | -1,04 | -1,11 | -1,09 |
| SLP1_0051 | - | Hypothetical | -1,00 | -1,07 | -1,44 |
| SLP1_0052 | <i>samA</i> | Protein samA | 1,10 | 1,07 | 1,43 |
| SLP1_0053 | <i>samB</i> | Protein samB | 1,05 | 1,04 | 1,75 |
| SLP1_0054 | <i>parB</i> | Plasmid Partition par B protein | 1,09 | 1,12 | 5,19 |
| SLP1_0055 | <i>parA</i> | Plasmid partition protein A | -1,14 | -1,37 | 5,75 |
| SLP1_0056 | <i>yfcl</i> | Uncharacterized protein pSLT051 | 1,11 | 1,07 | -1,41 |
| SLP1_0057 | - | Cytoplasmic Protein | 1,14 | -1,02 | 2,77 |
| SLP1_0058 | - | Uncharacterized protein pSLT049 | 1,01 | -1,09 | 2,85 |
| SLP1_0059 | - | Myosin Heavy Chain Gizzard Smooth | -1,00 | 1,14 | 2,65 |
| SLP1_0060 | - | Hypothetical | -1,13 | -1,24 | -1,05 |
| SLP1_0061 | <i>yadF</i> | Carbonic anhydrase | -1,12 | -1,02 | -1,50 |
| SLP1_0062 | <i>pinE</i> | Integrase-like protein y4IS | 1,07 | -1,16 | -1,13 |
| SLP1_0063 | - | Transposase | 1,19 | -1,09 | 1,20 |
| SLP1_0064 | - | AAA ATPase | 1,06 | 1,11 | 1,04 |
| SLP1_0065 | - | Insertion element IS630 uncharacterized 39 kDa protein | 1,15 | 1,14 | -2,02 |
| SLP1_0066 | <i>spvR</i> | Virulence genes transcriptional activator | -1,09 | 1,04 | -1,11 |
| SLP1_0067 | <i>spvA</i> | 28.1 kDa virulence protein | -1,35 | 1,10 | -6,22 |
| SLP1_0068 | <i>spvB</i> | 65 kDa virulence protein | -1,39 | 1,03 | -12,28 |
| SLP1_0069 | <i>spvC</i> | 27.5 kDa virulence protein | -1,59 | -1,30 | -34,55 |
| SLP1_0070 | <i>spvD</i> | Virulence protein vsdE | -1,34 | -1,34 | -10,27 |
| SLP1_0071 | - | Transposase | 1,40 | 1,13 | -1,16 |
| SLP1_0072 | <i>vsdF</i> | Virulence protein vsdF | 1,03 | -1,06 | -1,01 |
| SLP1_0073 | <i>yeeJ</i> | Uncharacterized protein yeeJ | 1,24 | 1,19 | -1,24 |
| SLP1_0074 | - | Hypothetical | 1,02 | 1,29 | 1,02 |
| SLP1_0075 | <i>yahA</i> | Cyclic di-GMP phosphodiesterase yahA | -1,06 | -1,03 | 1,11 |
| SLP1_0076 | <i>resD</i> | Resolvase | 1,05 | -1,01 | 1,75 |
| SLP1_0077 | - | Cytoplasmic Protein | -1,01 | -1,14 | 2,14 |
| SLP1_0078 | - | Hypothetical | 1,07 | -1,04 | 1,97 |
| SLP1_0079 | <i>ccdB</i> | Cytotoxic protein CcdB | -1,01 | -1,01 | 2,35 |
| SLP1_0080 | <i>ccdA</i> | Protein CcdA | 1,08 | 1,02 | 2,95 |
| SLP1_0081 | - | Hypothetical | 1,13 | 1,25 | 1,04 |
| SLP1_0082 | - | Cytoplasmic Protein | 1,18 | 1,10 | -1,64 |
| SLP1_0083 | - | Replication Protein | -1,18 | -1,18 | -1,36 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SLP1_0084 | <i>repA</i> | RepFIB replication protein A | -1,12 | -1,14 | -1,34 |
| SLP1_0085 | <i>ygiW</i> | Protein ygiW | -1,22 | 1,02 | -1,32 |
| SLP1_0086 | <i>papB</i> | Major pilu subunit operon regulatory protein papB | 1,95 | 2,29 | -1,65 |
| SLP1_0087 | <i>fedA</i> | F107 fimbrial protein | 1,31 | 1,36 | 2,72 |
| SLP1_0088 | <i>pefC</i> | Outer membrane usher protein pefC | -1,08 | -1,29 | 1,62 |
| SLP1_0089 | <i>fanE</i> | Chaperone protein fanE | 1,14 | 1,08 | 1,90 |
| SLP1_0090 | - | Outer Membrane Protein | 1,25 | -1,11 | 1,49 |
| SLP1_0091 | - | Hypothetical | -1,02 | 1,01 | -1,21 |
| SLP1_0092 | - | Regulatory Protein | 1,16 | 1,07 | -1,34 |
| SLP1_0093 | <i>rcsB</i> | GerE Family Regulatory Protein | 1,21 | 1,09 | -1,15 |
| SLP1_0094 | <i>dsbA</i> | Thiol:disulfide interchange protein DsbA | 1,31 | 1,16 | 1,19 |
| SLP1_0095 | <i>yjiK</i> | Uncharacterized protein yjiK | 1,43 | 1,02 | -1,05 |
| SLP1_0096 | <i>pagC</i> | Virulence membrane protein pagC | 1,40 | 1,04 | 2,84 |
| SLP1_0097 | <i>gadX</i> | HTH-type transcriptional regulator gadX | 1,27 | 1,05 | 1,55 |
| SLP1_0098 | <i>yjiK</i> | Outer Membrane Protein | 1,20 | 1,14 | -1,06 |
| SLP1_0099 | <i>repA</i> | Replication initiation protein | 1,13 | 1,06 | -1,50 |
| SLP1_0100 | - | Hypothetical Protein SLP1_0100 | 1,17 | 1,10 | -1,80 |
| SLP1_0101 | - | DNA Replication Protein | 1,15 | 1,16 | -1,67 |
| SLP1_0102 | <i>repA2</i> | Replication regulatory protein repA2 | 1,11 | 1,30 | -1,15 |
| SLP1_0103 | - | Endonuclease | 1,38 | 1,17 | -1,05 |
| SLP1_0104 | - | DSBA Oxidoreductase | 1,33 | 1,21 | 1,41 |
| SLP2_0001 | - | Hypothetical Protein SLP2_0001 | 1,13 | -1,02 | -1,30 |
| SLP2_0002 | <i>repA</i> | Replication initiation protein | 1,03 | -1,04 | -1,35 |
| SLP2_0003 | - | Hypothetical | 1,01 | 1,12 | 4,59 |
| SLP2_0004 | - | Addiction Module Antitoxin | 1,09 | 1,15 | 3,55 |
| SLP2_0005 | <i>dnaQ</i> | Uncharacterized protein pSLT049 | 1,03 | 1,28 | 4,21 |
| SLP2_0006 | - | Hypothetical | 1,03 | 1,12 | 1,99 |
| SLP2_0007 | - | Hypothetical Protein SLP2_0007 | -1,01 | 1,06 | 1,08 |
| SLP2_0008 | - | Hypothetical | -1,55 | -1,08 | 1,80 |
| SLP2_0009 | - | Hypothetical | -1,52 | -1,18 | 2,29 |
| SLP2_0010 | - | Hypothetical | -1,35 | -1,13 | 1,97 |
| SLP2_0011 | - | Uncharacterized protein in cib 5'region | 1,10 | 1,08 | 5,04 |
| SLP2_0012 | <i>cib</i> | Colicin-lb | 1,33 | 1,46 | 4,20 |
| SLP2_0013 | - | Colicin-lb immunity protein | 1,05 | 1,29 | 1,03 |
| SLP2_0014 | - | Hypothetical | 1,39 | 1,43 | 1,40 |
| SLP2_0015 | - | Hypothetical | -1,09 | -1,09 | 2,04 |
| SLP2_0016 | - | Hypothetical | -1,09 | -1,31 | 2,65 |
| SLP2_0017 | <i>resD</i> | Resolvase | -1,24 | -1,45 | 2,37 |
| SLP2_0018 | - | Hypothetical Protein SLP2_0018 | 1,07 | -1,23 | 1,31 |
| SLP2_0019 | - | Hypothetical | -1,09 | -1,30 | 1,91 |
| SLP2_0020 | - | Hypothetical | -1,03 | -1,12 | 2,26 |
| SLP2_0021 | <i>parM</i> | Plasmid segregation protein parM | -1,10 | -1,09 | 1,42 |
| SLP2_0022 | - | Plasmid Stability Protein | -1,00 | -1,03 | 1,35 |
| SLP2_0023 | <i>impC</i> | Protein impC | 1,09 | -1,01 | 1,02 |
| SLP2_0024 | <i>yuaZ</i> | Uncharacterized protein yuaZ | 1,14 | 1,10 | -1,22 |
| SLP2_0025 | <i>yubA</i> | Uncharacterized protein YubA | 1,62 | 1,38 | 1,16 |
| SLP2_0026 | <i>yubC</i> | Uncharacterized protein yubC | 1,13 | 1,01 | 1,06 |
| SLP2_0027 | <i>yubD</i> | Putative methylase yubD | 1,36 | 1,79 | 1,34 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>greA</i> vs | <i>greB</i> vs | <i>greAgreB</i> |
|-----------|-------------|---|----------------|----------------|-----------------|
| | | | WT | WT | vs WT |
| SLP2_0028 | <i>yubE</i> | Uncharacterized protein YubE | 1,70 | 1,53 | 1,58 |
| SLP2_0029 | <i>yubF</i> | Uncharacterized protein yubF | 1,32 | 1,06 | 2,34 |
| SLP2_0030 | - | Uncharacterized protein yubG | 1,40 | 1,39 | 2,83 |
| SLP2_0031 | <i>yubH</i> | Uncharacterized protein yubH | -1,04 | -1,23 | 2,24 |
| SLP2_0032 | <i>yubI</i> | Putative antirestriction protein YubI | 1,27 | 1,21 | 3,00 |
| SLP2_0033 | <i>yubJ</i> | Uncharacterized protein yubJ | 1,06 | 1,04 | 3,01 |
| SLP2_0034 | - | Hypothetical | -1,22 | -1,07 | -1,11 |
| SLP2_0035 | <i>ssb</i> | Plasmid-derived single-stranded DNA-binding protein | 1,09 | -1,03 | 1,94 |
| SLP2_0036 | <i>yubM</i> | Uncharacterized protein yubM | 1,09 | 1,12 | 2,51 |
| SLP2_0037 | <i>psiB</i> | Protein psiB | 1,24 | 1,17 | 4,39 |
| SLP2_0038 | <i>psiA</i> | Protein psiA | 1,23 | 1,09 | 5,34 |
| SLP2_0039 | - | Hypothetical | 1,36 | 1,11 | 4,78 |
| SLP2_0040 | <i>yubH</i> | Uncharacterized protein yubH | 1,69 | -1,07 | 1,54 |
| SLP2_0041 | - | Antirestriction Protein | 1,09 | 1,14 | 1,32 |
| SLP2_0042 | - | Hypothetical | 1,28 | 1,06 | -1,52 |
| SLP2_0043 | - | Hypothetical | 1,14 | 1,21 | 1,31 |
| SLP2_0044 | <i>yfcl</i> | Uncharacterized protein pSLT051 | 1,09 | 1,07 | 2,09 |
| SLP2_0045 | - | Hypothetical | 1,04 | 1,15 | -1,28 |
| SLP2_0047 | - | Hypothetical | 1,23 | 1,21 | 1,13 |
| SLP2_0048 | - | Hypothetical | 1,06 | -1,14 | -1,02 |
| SLP2_0049 | <i>tral</i> | Protein tral | -1,13 | -1,33 | 1,29 |
| SLP2_0050 | - | Hypothetical | 1,09 | -1,04 | 1,21 |
| SLP2_0051 | - | Hypothetical | 1,11 | -1,00 | -1,08 |
| SLP2_0052 | - | Hypothetical | 1,32 | 1,13 | 1,12 |
| SLP2_0053 | - | Plasmid Stability Protein | -1,16 | 1,88 | -1,40 |
| SLP2_0054 | <i>pndA</i> | Protein pndA | -1,02 | 1,41 | 1,04 |
| SLP2_0055 | <i>exc</i> | Exclusion-determining protein | -1,00 | 1,12 | 1,84 |
| SLP2_0056 | - | Hypothetical | 1,14 | -1,04 | -1,58 |
| SLP2_0057 | - | TraX-Like Protein | 1,03 | 1,08 | -1,63 |
| SLP2_0058 | - | Hypothetical | 1,23 | 1,04 | 1,37 |
| SLP2_0059 | - | Conjugal Transfer Protein | 1,13 | -1,00 | 1,21 |
| SLP2_0060 | - | Hypothetical | 1,20 | -1,00 | 1,15 |
| SLP2_0061 | - | Hypothetical | 1,09 | -1,03 | -1,33 |
| SLP2_0062 | - | Hypothetical | 1,13 | 1,12 | -1,40 |
| SLP2_0063 | - | Hypothetical | 1,03 | 1,08 | -2,42 |
| SLP2_0064 | - | TraQ Protein | 1,13 | 1,18 | -2,04 |
| SLP2_0065 | - | TraP Protein | 1,08 | 1,10 | -1,20 |
| SLP2_0066 | - | Hypothetical | 1,15 | -1,09 | -1,56 |
| SLP2_0067 | - | Hypothetical | 1,11 | -1,23 | -1,77 |
| SLP2_0068 | - | Hypothetical | 1,07 | -1,06 | -1,50 |
| SLP2_0069 | - | Tral Protein | 1,12 | 1,13 | -1,02 |
| SLP2_0070 | - | DNA Primase | 1,09 | 1,02 | -1,10 |
| SLP2_0072 | <i>pld</i> | Phospholipase D | 1,21 | -1,04 | 1,35 |
| SLP2_0073 | - | Hypothetical | 1,17 | -1,14 | 1,26 |
| SLP2_0074 | <i>yggR</i> | Uncharacterized protein yggR | 1,21 | -1,03 | 1,40 |
| SLP2_0075 | - | Hypothetical | 1,19 | -1,02 | 1,05 |
| SLP2_0076 | - | TraH Protein | 1,30 | 1,12 | 1,00 |

Tabla Suplementaria 1Diferencia de expresión de todos los genes de SV5015 en las cepas mutantes *greA*, *greB* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SLP2_0077 | <i>ais</i> | Lipopolysaccharide core heptose(II)-phosphate phosphatase | 1,11 | -1,28 | -1,20 |
| SLP2_0078 | - | Hypothetical | 1,48 | 1,07 | 3,93 |
| SLP2_0079 | - | Hypothetical | 1,29 | 1,13 | 3,02 |
| SLP2_0080 | <i>rcl</i> | Shufflon-specific DNA recombinase | 1,18 | -1,04 | 1,03 |
| SLP2_0081 | - | Shufflon protein B' | 1,21 | 1,09 | -1,69 |
| SLP2_0082 | - | Shufflon protein B | 1,15 | -1,01 | -1,73 |
| SLP2_0083 | - | Shufflon protein A | 1,09 | 1,00 | -1,36 |
| SLP2_0085 | - | Shufflon protein A' | -1,01 | -1,16 | -1,58 |
| SLP2_0086 | - | Prepilin Peptidase | -1,08 | -1,21 | -3,05 |
| SLP2_0087 | <i>pbl</i> | Peptidoglycan-binding-like protein | 1,09 | 1,03 | -2,03 |
| SLP2_0088 | - | Type IV Prepilin | 1,22 | 1,23 | -1,32 |
| SLP2_0089 | - | Type II Secretion System Protein | 1,10 | -1,04 | -1,36 |
| SLP2_0090 | <i>tcpT</i> | Toxin coregulated pilus biosynthesis protein T | 1,06 | -1,15 | -1,05 |
| SLP2_0091 | - | Pilus Assembly Protein | 1,06 | -1,16 | -1,20 |
| SLP2_0092 | - | Hypothetical | 1,08 | -1,16 | -1,03 |
| SLP2_0093 | <i>bfpB</i> | Outer membrane lipoprotein BfpB | 1,11 | -1,11 | -1,05 |
| SLP2_0094 | - | PilM Protein | 1,14 | 1,01 | -1,07 |
| SLP2_0095 | - | Hypothetical | 1,19 | 1,15 | 1,08 |
| SLP2_0096 | - | Hypothetical | 1,03 | -1,10 | -1,20 |
| SLP2_0097 | - | Hypothetical | 1,07 | 1,04 | 1,36 |
| SLP2_0098 | - | Hypothetical | 1,19 | -1,08 | -1,06 |
| SLP2_0100 | - | Hypothetical | 1,09 | 1,12 | -1,06 |
| SLP2_0101 | - | Conjugal Transfer Protein | 1,28 | -1,05 | 1,40 |
| SLP2_0102 | - | Transcription Antitermination Factor | 1,08 | 1,21 | 1,08 |
| SLP2_0103 | - | Hypothetical Protein SLP2_0103 | 1,36 | 1,25 | -1,22 |
| SLP3_0001 | <i>sull</i> | Dihydropteroate synthase type-2 | 1,09 | 1,00 | -2,14 |
| SLP3_0002 | - | Hypothetical | 1,11 | 1,30 | 1,22 |
| SLP3_0003 | - | Replication C Family Protein | 1,36 | 1,12 | 1,20 |
| SLP3_0004 | <i>repA</i> | Regulatory protein repA | 1,20 | 1,20 | 2,05 |
| SLP3_0005 | - | Hypothetical Protein SLP3_0005 | 1,08 | 1,10 | 2,21 |
| SLP3_0006 | - | Hypothetical Protein SLP3_0006 | 1,15 | 1,23 | 2,23 |
| SLP3_0007 | <i>mobA</i> | Mobilization protein A | 1,27 | 1,09 | 2,75 |
| SLP3_0008 | <i>mobA</i> | Mobilization protein A | 1,39 | 1,26 | 2,71 |
| SLP3_0009 | <i>mobB</i> | Mobilization protein B | 1,30 | 1,14 | 2,64 |
| SLP3_0010 | - | Uncharacterized mobilization operon protein F | 1,21 | -1,06 | 1,25 |
| SLP3_0011 | <i>mobC</i> | Mobilization protein C | 1,12 | 1,04 | 3,03 |
| SLP3_0012 | - | Transposase | 1,18 | -1,07 | -1,23 |
| SLP3_0013 | <i>str</i> | Streptomycin 3"-kinase | 1,14 | -1,10 | -1,52 |
| SLP3_0014 | <i>aphE</i> | Streptomycin 3"-kinase | 1,05 | -1,04 | -1,38 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-------------------|-------------------|-----------------------|
| SL0002 | <i>thrA</i> | Bifunctional aspartokinase/homoserine dehydrogenase 1 | 1,70 | 1,02 | 2,42 |
| SL0005 | <i>yaaA</i> | UPF0246 protein yaaA | 1,04 | 1,17 | -2,22 |
| SL0008 | <i>mog</i> | Molybdopterin adenyllyltransferase | 1,33 | 1,02 | 2,27 |
| SL0012 | <i>dnaK</i> | Chaperone protein dnaK | 1,05 | 1,13 | 2,97 |
| SL0013 | <i>dnaJ</i> | Chaperone protein dnaJ | -1,06 | -1,09 | 2,03 |
| SL0034 | <i>yhcR</i> | Endonuclease yhcR | 1,37 | 1,25 | 2,40 |
| SL0036 | <i>betC</i> | Choline-sulfatase | -1,04 | -1,01 | 3,95 |
| SL0042 | <i>yicl</i> | Uncharacterized family 31 glucosidase ORF2 | 1,21 | 1,14 | 2,73 |
| SL0043 | <i>xylP</i> | putative sodium galactoside symporter | 1,11 | -1,37 | 7,93 |
| SL0044 | <i>rpsT</i> | 30S ribosomal protein S20 | -1,21 | 1,09 | -3,04 |
| SL0052 | <i>rihC</i> | Non-specific ribonucleoside hydrolase rihC | 1,40 | 1,26 | 3,12 |
| SL0055 | <i>oadB1</i> | Oxaloacetate decarboxylase beta chain 1 | 1,32 | 1,13 | 2,23 |
| SL0056 | <i>oadA</i> | Oxaloacetate decarboxylase alpha chain | 1,21 | -1,06 | 2,57 |
| SL0057 | <i>oadG1</i> | Probable oxaloacetate decarboxylase gamma chain 1 | 1,12 | -1,07 | 4,14 |
| SL0058 | <i>citC</i> | Citrate-sodium symporter | -1,32 | -1,22 | 3,02 |
| SL0061 | <i>citE</i> | Citrate lyase subunit beta | 1,11 | 1,07 | 7,85 |
| SL0064 | <i>citG1</i> | Probable 2-(5"-triphosphoribosyl)-3'-dephosphocoenzyme-A synthase 1 | 1,12 | 1,15 | 2,58 |
| SL0066 | - | putative viral protein | 1,03 | -1,28 | -4,48 |
| SL0068 | <i>carB</i> | Carbamoyl-phosphate synthase large chain | 1,02 | 1,13 | 2,03 |
| SL0071 | <i>caiD</i> | Carnitinyl-CoA dehydratase | 1,28 | -1,04 | 2,23 |
| SL0081 | <i>ygdl</i> | Uncharacterized lipoprotein ygdl | -1,38 | 1,04 | -2,13 |
| SL0096 | <i>rluA</i> | Ribosomal large subunit pseudouridine synthase A | 2,03 | 1,02 | 2,39 |
| SL0102 | <i>araA</i> | L-arabinose isomerase | 1,07 | -1,06 | 2,50 |
| SL0103 | <i>araB</i> | Ribulokinase | 1,02 | -1,03 | 3,31 |
| SL0104 | <i>araC</i> | Arabinose operon regulatory protein | 1,10 | -1,07 | 10,58 |
| SL0110 | <i>leuD</i> | 3-isopropylmalate dehydratase small subunit 1 | 1,18 | -1,08 | 2,28 |
| SL0111 | <i>leuC</i> | 3-isopropylmalate dehydratase large subunit 1 | 1,24 | 1,05 | 3,98 |
| SL0112 | <i>leuB</i> | 3-isopropylmalate dehydrogenase | 1,21 | -1,08 | 3,10 |
| SL0115 | <i>leuO</i> | Probable HTH-type transcriptional regulator leuO | -1,27 | 1,23 | -2,01 |
| SL0143 | <i>hofB</i> | Protein transport protein hofB | -1,00 | -1,08 | 2,18 |
| SL0144 | <i>ppdD</i> | Prephilin peptidase-dependent protein D | -1,04 | 1,06 | 2,04 |
| SL0150 | <i>aroP</i> | Aromatic amino acid transport protein AroP | 1,04 | -1,07 | 2,45 |
| SL0151 | <i>pdhR</i> | Pyruvate dehydrogenase complex repressor | -1,06 | -1,15 | -2,74 |
| SL0153 | <i>aceF</i> | Dihydrolipoylysine-residue acetyltransferase component of pyruvate dehydrogenase complex | 1,13 | -1,02 | 3,97 |
| SL0154 | <i>lpdA</i> | Dihydrolipoyl dehydrogenase | 1,13 | -1,04 | 2,79 |
| SL0159 | <i>acnB</i> | Aconitate hydratase 2 | 1,07 | -1,21 | 3,83 |
| SL0160 | - | Restriction Endonuclease | -1,11 | -1,47 | -2,18 |
| SL0161 | <i>yacL</i> | UPF0231 protein yacL | 1,28 | 1,31 | 2,93 |
| SL0163 | <i>ygbK</i> | Uncharacterized protein HI_1011 | 1,23 | -1,06 | 4,11 |
| SL0164 | <i>pdxA2</i> | 4-hydroxythreonine-4-phosphate dehydrogenase 2 | 1,36 | 1,07 | 2,76 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL0178 | <i>fimF</i> | Fimbrial subunit type 1 | 1,05 | -1,03 | 3,27 |
| SL0180 | <i>yadE</i> | Uncharacterized protein yadE | -1,14 | 1,11 | -2,44 |
| SL0185 | <i>pcnB</i> | Poly(A) polymerase | -1,08 | -1,04 | -2,92 |
| SL0186 | <i>yadB</i> | glutamyl-tRNA synthetase | -1,27 | -1,04 | -3,74 |
| SL0192 | <i>fhuA</i> | Ferrichrome-iron receptor | -1,04 | 1,41 | -2,51 |
| SL0196 | <i>stfA</i> | Fimbria A protein | 1,28 | -1,06 | 3,38 |
| SL0211 | <i>cdaR</i> | Carbohydrate diacid regulator | -1,03 | -1,04 | 4,32 |
| SL0212 | <i>yaeH</i> | UPF0325 protein ESA_03178 | -1,12 | -1,14 | 3,29 |
| SL0213 | <i>shiA</i> | Shikimate transporter | -1,19 | 1,05 | -2,38 |
| SL0221 | <i>dxr</i> | 1-deoxy-D-xylulose 5-phosphate reductoisomerase | -1,00 | -1,05 | -2,21 |
| SL0222 | <i>uppS</i> | Undecaprenyl pyrophosphate synthase | -1,06 | 1,22 | -2,18 |
| SL0244 | <i>yaeB</i> | UPF0066 protein yaeB | 1,15 | 1,05 | -2,27 |
| SL0255 | <i>mltD</i> | Membrane-bound lytic murein transglycosylase D | -1,61 | 1,08 | -6,32 |
| SL0265 | <i>sciF</i> | Cytoplasmic Protein | 1,19 | 1,05 | 2,97 |
| SL0266 | <i>clpB</i> | Chaperone protein clpB | 1,15 | -1,36 | 3,43 |
| SL0267 | <i>sciH</i> | Hypothetical | 1,22 | 1,04 | 3,82 |
| SL0268 | <i>scil</i> | Hypothetical | 1,09 | -1,15 | 2,77 |
| SL0300 | <i>sinR</i> | Probable HTH-type transcriptional regulator sinR | -1,68 | -1,43 | -2,91 |
| SL0305 | <i>fadE</i> | Acyl-coenzyme A dehydrogenase | -1,34 | 1,19 | 9,79 |
| SL0310 | <i>ykfJ</i> | Uncharacterized protein ykfJ (pseudo) | -1,37 | -1,03 | -2,01 |
| SL0313 | <i>gpt</i> | Xanthine phosphoribosyltransferase | 1,09 | 1,06 | -2,59 |
| SL0315 | <i>crl</i> | Sigma factor-binding protein crl | 1,19 | 1,17 | 2,15 |
| SL0316 | <i>phoE</i> | Outer membrane pore protein E | 1,24 | 1,23 | 2,05 |
| SL0336 | - | Transmembrane Regulator | -1,37 | -1,27 | -3,98 |
| SL0337 | - | Periplasmic Protein | -1,33 | -1,26 | -2,23 |
| SL0344 | <i>yjeI</i> | Uncharacterized protein yjeI | 1,27 | 1,26 | 3,73 |
| SL0348 | <i>actP</i> | Copper-transporting P-type ATPase | 1,08 | -1,11 | 4,15 |
| SL0349 | <i>hmrR</i> | HTH-type transcriptional regulator hmrR | 1,16 | 1,30 | 2,01 |
| SL0350 | - | putative copper chaperone | 1,36 | -1,02 | 2,36 |
| SL0351 | <i>yjhB</i> | Putative metabolite transport protein yjhB | -1,16 | -1,13 | 2,18 |
| SL0353 | <i>res</i> | Type III restriction-modification system StyLT1 enzyme res | 1,14 | 1,07 | 2,64 |
| SL0360 | <i>yahN</i> | Uncharacterized membrane protein yahN | 1,41 | 1,47 | 3,45 |
| SL0362 | <i>prpR</i> | Propionate catabolism operon regulatory protein | 1,09 | -1,04 | 2,42 |
| SL0363 | <i>prpB</i> | Methylisocitrate lyase | 1,04 | 1,27 | 2,74 |
| SL0364 | <i>prpC</i> | 2-methylcitrate synthase | -1,05 | 1,08 | 5,33 |
| SL0365 | <i>prpD</i> | 2-methylcitrate dehydratase | 1,05 | -1,05 | 6,64 |
| SL0366 | <i>prpE</i> | Propionate--CoA ligase | 1,23 | -1,12 | 4,91 |
| SL0371 | <i>sbmA</i> | Protein sbmA | 1,23 | -1,04 | -2,98 |
| SL0372 | <i>yaiW</i> | Uncharacterized protein yaiW | 1,01 | 1,11 | -2,53 |
| SL0374 | <i>yaiZ</i> | Uncharacterized protein yaiZ | 1,39 | 1,18 | 2,44 |
| SL0376 | - | Extensin Family Protein | 1,14 | 1,21 | 4,71 |
| SL0377 | <i>mdtG</i> | Multidrug resistance protein mdtG | 1,08 | -1,08 | -2,63 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL0382 | <i>yail</i> | UPF0178 protein yail | -1,15 | -1,06 | -2,28 |
| SL0387 | <i>rdgC</i> | Recombination-associated protein rdgC | 1,02 | -1,04 | -2,81 |
| SL0391 | <i>sbcD</i> | Nuclease sbcCD subunit D | 1,16 | 1,08 | -2,20 |
| SL0395 | <i>proY</i> | Proline-specific permease proY | 1,33 | 1,01 | -2,05 |
| SL0397 | <i>ahpC</i> | Probable peroxiredoxin | -1,02 | 1,14 | -2,76 |
| SL0399 | <i>queA</i> | S-adenosylmethionine:tRNA ribosyltransferase-isomerase | -1,10 | 1,07 | -2,69 |
| SL0415 | <i>yajO</i> | Uncharacterized oxidoreductase yajO | 1,20 | 1,41 | 2,32 |
| SL0419 | <i>thil</i> | tRNA sulfurtransferase | 1,08 | -1,05 | -2,71 |
| SL0432 | <i>ybeT</i> | Hypothetical | -1,10 | -1,28 | 2,29 |
| SL0433 | <i>cyoE</i> | Protoheme IX farnesyltransferase | -1,12 | -1,50 | 11,62 |
| SL0434 | <i>cyoD</i> | Cytochrome c ubiquinol oxidase protein cyoD | -1,20 | -1,53 | 13,42 |
| SL0435 | <i>cyoC</i> | Cytochrome c ubiquinol oxidase subunit 3 | -1,10 | -1,60 | 13,28 |
| SL0436 | <i>cyoB</i> | Ubiquinol oxidase subunit 1 | -1,08 | -1,42 | 5,97 |
| SL0437 | <i>cyoA</i> | Ubiquinol oxidase subunit 2 | -1,09 | -1,17 | 6,05 |
| SL0444 | <i>lon</i> | Hypothetical Protein lon | 1,07 | 1,06 | 2,44 |
| SL0445 | <i>hupB</i> | DNA-binding protein HU-beta | 1,17 | 1,14 | 2,02 |
| SL0449 | <i>queC</i> | 7-cyano-7-deazaguanine synthase (putative aluminum resistance protein) | 1,00 | -1,01 | -2,53 |
| SL0450 | <i>ybaE</i> | Uncharacterized protein ybaE | 1,13 | 1,12 | 6,33 |
| SL0480 | <i>htpG</i> | Chaperone protein htpG | 1,08 | -1,04 | 3,68 |
| SL0482 | <i>hemH</i> | Ferrochelatase | 1,04 | -1,00 | -8,01 |
| SL0484 | <i>gsk</i> | Inosine-guanosine kinase | 1,01 | 1,00 | -2,02 |
| SL0487 | <i>ushA</i> | Protein ushA | -1,05 | -1,36 | 4,38 |
| SL0502 | - | Outer Membrane Protein | 1,25 | -1,12 | 2,30 |
| SL0507 | <i>allS</i> | lysR family transcriptional regulator | 1,23 | 1,15 | 7,16 |
| SL0508 | <i>allA</i> | Ureidoglycolate hydrolase | -1,06 | -1,21 | 2,65 |
| SL0510 | <i>gcl</i> | Glyoxylate carboligase | 1,65 | -1,22 | 7,44 |
| SL0511 | <i>gip</i> | Hydroxypyruvate isomerase | 1,41 | -1,11 | 10,16 |
| SL0512 | <i>glxR</i> | 2-hydroxy-3-oxopropionate reductase | 1,60 | -1,03 | 5,13 |
| SL0513 | <i>yybO</i> | metabolite transport protein | 1,43 | 1,14 | 4,88 |
| SL0515 | <i>ybbW</i> | Putative allantoin permease | 1,66 | 1,02 | 3,89 |
| SL0516 | <i>allB</i> | Allantoinase | 1,05 | 1,11 | 2,94 |
| SL0518 | <i>glxK</i> | Glycerate kinase 1 | 1,20 | 1,10 | 2,36 |
| SL0519 | <i>ylbA</i> | Uncharacterized protein ylbA | -1,04 | -1,27 | 2,29 |
| SL0520 | <i>allC</i> | Allantoate amidohydrolase | -1,08 | -1,17 | 3,13 |
| SL0521 | <i>allD</i> | Ureidoglycolate dehydrogenase | -1,04 | -1,46 | 5,10 |
| SL0522 | <i>fdrA</i> | Protein fdrA | 1,14 | 1,12 | 3,41 |
| SL0523 | <i>ylbE</i> | Uncharacterized protein ylbE | 1,09 | -1,20 | 3,61 |
| SL0533 | <i>ybcl</i> | Inner membrane protein ybcl | -1,08 | 1,05 | -2,95 |
| SL0536 | <i>fimA</i> | Fimbrial subunit type 1 | -1,80 | 1,10 | -9,56 |
| SL0537 | <i>fimI</i> | Putative fimbrial-like protein fimI | -2,48 | -1,26 | -17,41 |
| SL0538 | <i>fimC</i> | Chaperone protein fimC | -2,52 | -1,37 | -22,44 |
| SL0539 | <i>fimD</i> | Outer membrane usher protein fimD | -1,99 | -1,09 | -5,31 |
| SL0540 | <i>fimH</i> | Protein fimH | -1,50 | -1,09 | -2,74 |
| SL0542 | <i>fimZ</i> | Fimbriae Z protein | -1,27 | 1,09 | -2,40 |
| SL0543 | <i>fimY</i> | Fimbriae Y protein | 1,43 | 1,29 | -2,23 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-------------------|-------------------|-----------------------|
| SL0544 | - | putative diguanylate cyclase/phosphodiesterase | -1,17 | 1,54 | -2,09 |
| SL0548 | <i>yfdH</i> | Bactoprenol glucosyl transferase homolog from prophage CPS-53 | -1,04 | -1,04 | -1,99 |
| SL0549 | <i>gtrA</i> | Bactoprenol-linked glucose translocase homolog from prophage CPS-53 | 1,09 | -1,03 | -2,84 |
| SL0551 | <i>ykgD</i> | Uncharacterized HTH-type transcriptional regulator <i>ykgD</i> | 1,16 | 1,20 | 3,20 |
| SL0552 | <i>ykgC</i> | Probable pyridine nucleotide-disulfide oxidoreductase <i>ykgC</i> | 1,12 | 1,11 | 2,34 |
| SL0554 | <i>ykgB</i> | Inner membrane protein <i>ykgB</i> | -1,12 | 1,08 | 2,01 |
| SL0559 | <i>levR</i> | Transcriptional regulatory protein <i>levR</i> | 1,07 | -1,01 | 2,64 |
| SL0560 | <i>frlB</i> | Fructosamine deglycase <i>frlB</i> | 1,61 | 1,34 | 2,73 |
| SL0566 | <i>nfnB</i> | Oxygen-insensitive NAD(P)H nitroreductase | 1,01 | -1,13 | 2,14 |
| SL0585 | <i>entB</i> | Isochorismatase | 1,10 | 1,23 | 2,00 |
| SL0586 | <i>entA</i> | 2,3-dihydro-2,3-dihydroxybenzoate dehydrogenase | 1,11 | -1,28 | 2,33 |
| SL0587 | <i>ybdB</i> | Esterase <i>ybdB</i> | -1,13 | -1,04 | 2,26 |
| SL0588 | <i>cstA</i> | Carbon starvation protein A | -1,16 | -1,23 | 9,48 |
| SL0589 | <i>ybdD</i> | Uncharacterized protein <i>ybdD</i> | -1,21 | -1,30 | 9,97 |
| SL0592 | <i>ybdM</i> | Uncharacterized protein <i>ybdM</i> | 1,15 | -1,04 | 2,44 |
| SL0596 | <i>ahpC</i> | Alkyl hydroperoxide reductase subunit C | 1,12 | 1,10 | -2,32 |
| SL0597 | <i>ahpF</i> | Alkyl hydroperoxide reductase subunit F | -1,10 | -1,02 | -2,42 |
| SL0598 | <i>ynfI</i> | Cytoplasmic Chaperone rD Family Protein | 1,33 | 1,02 | -3,67 |
| SL0605 | <i>rna</i> | Ribonuclease I | -1,07 | 1,13 | -2,35 |
| SL0610 | <i>citE</i> | Citrate lyase subunit beta | 1,06 | 1,12 | -2,50 |
| SL0611 | <i>citD</i> | Citrate lyase acyl carrier protein 1 | -1,06 | 1,09 | -2,36 |
| SL0612 | <i>citC</i> | [Citrate [pro-3S]-lyase] ligase | -1,02 | 1,10 | -2,47 |
| SL0613 | <i>dpiB</i> | Sensor histidine kinase <i>DpiB</i> | -1,09 | 1,19 | -3,56 |
| SL0614 | <i>dpiA</i> | Transcriptional regulatory protein <i>DpiA</i> | 1,03 | 1,04 | -2,28 |
| SL0615 | <i>dcuC</i> | Anaerobic C4-dicarboxylate transporter <i>dcuC</i> | 1,18 | 1,06 | -2,87 |
| SL0616 | <i>pagP</i> | antimicrobial peptide resistance and lipid A acylation protein | -1,02 | 1,07 | -6,65 |
| SL0617 | <i>cspE</i> | Cold shock-like protein <i>cspE</i> | -1,33 | 1,02 | -2,78 |
| SL0620 | <i>tatE</i> | Sec-independent protein translocase protein <i>tatE</i> | -1,01 | 1,14 | -2,04 |
| SL0625 | <i>dacA</i> | D-alanyl-D-alanine carboxypeptidase <i>dacA</i> | -1,04 | 1,03 | -2,41 |
| SL0637 | - | putative hydrolase N-terminus | 1,26 | -1,00 | -7,34 |
| SL0638 | <i>uxaA</i> | putative hydrolase C-terminus | 1,24 | -1,26 | -5,57 |
| SL0639 | <i>kdgT2</i> | 2-keto-3-deoxygluconate permease 2 | 1,23 | 1,24 | -2,50 |
| SL0641 | <i>ybeL</i> | Uncharacterized protein <i>ybeL</i> | 1,43 | 1,38 | 4,14 |
| SL0642 | <i>ybeQ</i> | Uncharacterized protein <i>ybeQ</i> | 1,10 | 1,13 | 2,20 |
| SL0644 | <i>ybeS</i> | putative molecular chaperone, DnaJ family | -1,25 | -1,33 | 1,98 |
| SL0649 | - | Hypothetical | -1,06 | 1,02 | 2,03 |
| SL0650 | <i>rihA</i> | Pyrimidine-specific ribonucleoside hydrolase <i>rihA</i> | -1,07 | -1,01 | 2,38 |
| SL0651 | <i>gltL</i> | Glutamate/aspartate transport ATP-binding protein <i>gltL</i> | -1,77 | -2,15 | 8,59 |
| SL0652 | <i>gltK</i> | Glutamate/aspartate transport system permease protein <i>gltK</i> | -1,72 | -2,00 | 8,36 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-------------------|-------------------|-----------------------|
| SL0653 | <i>gltJ</i> | Glutamate/aspartate transport system permease protein gltJ | -1,52 | -1,47 | 5,50 |
| SL0654 | <i>gltI</i> | Glutamate/aspartate periplasmic-binding protein | -1,40 | -1,20 | 6,78 |
| SL0655 | <i>Int</i> | Apolipoprotein N-acyltransferase | -1,21 | -1,42 | -2,17 |
| SL0660 | <i>ubiF</i> | 2-octaprenyl-3-methyl-6-methoxy-1,4-benzoquinol hydroxylase | 1,46 | 1,20 | 2,78 |
| SL0669 | <i>ybfM</i> | Uncharacterized protein ybfM | -1,09 | -1,10 | 2,74 |
| SL0670 | <i>ybfN</i> | Uncharacterized lipoprotein ybfN | 1,01 | -1,18 | 3,34 |
| SL0671 | <i>citA</i> | Citrate-proton symporter | -1,21 | -1,15 | 2,57 |
| SL0672 | <i>citB</i> | Citrate utilization protein B | 1,06 | -1,08 | 3,82 |
| SL0673 | <i>ifcA</i> | Fumarate reductase flavoprotein subunit | -1,01 | -1,07 | 2,24 |
| SL0675 | <i>fur</i> | Ferric uptake regulation protein | 1,00 | 1,07 | -2,81 |
| SL0676 | <i>fldA</i> | Flavodoxin-1 | -1,03 | 1,01 | -1,98 |
| SL0681 | - | 5-Nitroimidazole Antibiotic Resistance Protein | 1,06 | 1,14 | -5,70 |
| SL0682 | <i>potE</i> | Putrescine-ornithine antiporter | 1,06 | -1,20 | -4,57 |
| SL0683 | <i>speF</i> | Ornithine decarboxylase, inducible | 1,04 | -1,26 | -4,29 |
| SL0691 | <i>dtpD</i> | Dipeptide permease D | 1,38 | -1,01 | -2,14 |
| SL0692 | <i>ybgI</i> | UPF0135 protein ybgI | 1,14 | 1,06 | 2,27 |
| SL0693 | <i>ybgJ</i> | Uncharacterized protein ybgJ | 1,17 | 1,00 | 2,74 |
| SL0694 | <i>ybgK</i> | Uncharacterized protein ybgK | 1,17 | -1,07 | 2,38 |
| SL0711 | <i>abrB</i> | Protein AbrB | 1,38 | 1,17 | 2,71 |
| SL0712 | <i>gltA</i> | Citrate synthase | 1,06 | -1,00 | 2,70 |
| SL0713 | - | Hypothetical | -1,31 | -1,16 | 3,77 |
| SL0714 | <i>sdhC</i> | Succinate dehydrogenase cytochrome b556 subunit | -1,15 | -1,23 | 8,34 |
| SL0715 | <i>sdhD</i> | Succinate dehydrogenase hydrophobic membrane anchor subunit | -1,10 | -1,29 | 6,00 |
| SL0716 | <i>sdhA</i> | Succinate dehydrogenase flavoprotein subunit | -1,00 | -1,20 | 8,19 |
| SL0717 | <i>sdhB</i> | Succinate dehydrogenase iron-sulfur subunit | -1,01 | -1,14 | 8,63 |
| SL0718 | <i>sucA</i> | 2-oxoglutarate dehydrogenase E1 component | 1,01 | -1,26 | 2,25 |
| SL0719 | <i>sucB</i> | Dihydrolipoylysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex | 1,09 | -1,10 | 2,41 |
| SL0720 | <i>sucC</i> | Succinyl-CoA ligase [ADP-forming] subunit beta | 1,14 | -1,24 | 3,54 |
| SL0721 | <i>sucD</i> | Succinyl-CoA ligase [ADP-forming] subunit alpha | 1,10 | -1,07 | 2,39 |
| SL0726 | <i>ybgC</i> | Acyl-CoA thioester hydrolase ybgC | -1,13 | 1,13 | -2,47 |
| SL0727 | <i>tolQ</i> | Protein tolQ | -1,29 | -1,15 | -2,54 |
| SL0728 | <i>tolR</i> | Protein tolR | -1,08 | -1,01 | -2,59 |
| SL0729 | <i>tolA</i> | Protein tolA | 1,01 | 1,18 | -2,07 |
| SL0740 | <i>ywbl</i> | Uncharacterized HTH-type transcriptional regulator ywbl | 1,10 | 1,17 | 3,02 |
| SL0745 | <i>oadB2</i> | Oxaloacetate decarboxylase beta chain | 1,38 | 1,16 | 2,25 |
| SL0746 | <i>citG</i> | 2-(5"-triphosphoribosyl)-3'-dephosphocoenzyme-A synthase | 1,60 | 1,35 | 2,94 |
| SL0753 | <i>galE</i> | UDP-glucose 4-epimerase | 1,12 | 1,17 | 2,06 |
| SL0760 | <i>modC</i> | Molybdenum import ATP-binding protein ModC | -1,14 | -1,11 | -2,39 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-----------------------|-----------------------|---------------------------|
| SL0762 | <i>ybhE</i> | putative 3-carboxymuconate cyclase | 1,19 | 1,08 | 2,28 |
| SL0764 | <i>hutl</i> | Imidazolonepropionase | 1,16 | 1,05 | 3,21 |
| SL0765 | <i>hutG</i> | Formimidoylglutamase | 1,08 | -1,06 | 4,38 |
| SL0766 | <i>hutC</i> | Histidine utilization repressor | -1,14 | -1,08 | 2,51 |
| SL0767 | <i>hutU</i> | Urocanate hydratase | -1,11 | -1,18 | 21,16 |
| SL0768 | <i>hutH</i> | Histidine ammonia-lyase | -1,22 | -1,51 | 18,07 |
| SL0771 | <i>bioB</i> | Biotin synthase | -1,22 | -1,11 | 2,06 |
| SL0776 | <i>slrP</i> | E3 ubiquitin-protein ligase slrP | -1,49 | -1,17 | -6,12 |
| SL0780 | <i>moaC</i> | Molybdenum cofactor biosynthesis protein C | 1,17 | 1,08 | 2,26 |
| SL0781 | <i>moaD</i> | Molybdopterin synthase sulfur carrier subunit | 1,13 | 1,02 | 2,25 |
| SL0782 | <i>moaE</i> | Molybdopterin synthase catalytic subunit | 1,38 | 1,21 | 2,41 |
| SL0796 | <i>rhlE</i> | ATP-dependent RNA helicase rhlE | -1,30 | -1,24 | -4,28 |
| SL0799 | <i>ybiJ</i> | Uncharacterized protein ybiJ | -1,05 | -1,01 | -3,65 |
| SL0803 | <i>glnQ</i> | Glutamine transport ATP-binding protein glnQ | -1,06 | -1,33 | 2,29 |
| SL0805 | <i>glnH</i> | Glutamine-binding periplasmic protein | 1,14 | -1,22 | 3,68 |
| SL0807 | <i>ybiF</i> | Inner membrane transporter rhtA | 1,01 | -1,06 | -2,23 |
| SL0808 | <i>ompX</i> | Outer membrane protein X | -1,01 | 1,19 | -2,41 |
| SL0813 | <i>ybiT</i> | Uncharacterized ABC transporter ATP-binding protein ybiT | -1,23 | 1,08 | -2,82 |
| SL0824 | <i>gsiA</i> | Glutathione import ATP-binding protein gsiA | 1,11 | -1,26 | 2,57 |
| SL0825 | <i>gsiB</i> | Glutathione-binding protein gsiB | 1,21 | 1,04 | 3,72 |
| SL0826 | <i>gsiC</i> | Glutathione transport system permease protein gsiC | 1,27 | 1,11 | 2,09 |
| SL0828 | <i>yliG</i> | putative Fe-S oxidoreductases family 1 | -1,00 | 1,12 | -2,33 |
| SL0829 | <i>bssR</i> | Biofilm regulator BssR | 1,61 | 2,18 | 2,38 |
| SL0835 | <i>cysL</i> | HTH-type transcriptional regulator cysL | -1,55 | 1,10 | -5,57 |
| SL0836 | <i>yxjC</i> | Uncharacterized transporter yxjC | -1,04 | 1,32 | -2,37 |
| SL0839 | <i>dacC</i> | D-alanyl-D-alanine carboxypeptidase dacC | 1,07 | 1,23 | 2,58 |
| SL0840 | <i>deoR</i> | Deoxyribose operon repressor | 1,00 | 1,10 | -2,08 |
| SL0841 | <i>ybjG</i> | Putative undecaprenyl-diphosphatase ybjG | -1,08 | 1,12 | -2,77 |
| SL0846 | <i>ybjL</i> | Putative transport protein ybjL | -1,04 | 1,02 | -2,78 |
| SL0848 | <i>grxA</i> | Glutaredoxin-1 | -1,19 | -1,03 | -1,99 |
| SL0854 | <i>potF</i> | Putrescine-binding periplasmic protein | 1,10 | 1,26 | 3,91 |
| SL0855 | <i>potG</i> | Putrescine transport ATP-binding protein potG | 1,38 | 1,04 | 2,73 |
| SL0856 | <i>potH</i> | Putrescine transport system permease protein potH | 1,29 | 1,16 | 2,71 |
| SL0871 | <i>ybjS</i> | putative nucleoside-diphosphate-sugar epimerase | -1,14 | 1,03 | -2,45 |
| SL0876 | <i>hcp</i> | Hydroxylamine reductase | 1,05 | 1,23 | 2,63 |
| SL0879 | <i>ybjX</i> | Uncharacterized protein ybjX | -1,58 | 1,10 | -5,97 |
| SL0880 | <i>macA</i> | Macrolide-specific efflux protein macA | -1,09 | 1,04 | -2,43 |
| SL0883 | <i>clpS</i> | ATP-dependent Clp protease adapter protein clpS | -1,14 | -1,01 | -3,50 |
| SL0885 | <i>tnpA1</i> | Transposase for insertion sequence element IS1541 | 1,26 | -1,00 | -2,87 |
| SL0888 | <i>ycaC</i> | Uncharacterized protein ycaC | 1,10 | 1,07 | 2,29 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL0889 | <i>yhhW</i> | Pirin-like protein PA2418 | 1,22 | 1,23 | 2,37 |
| SL0892 | - | Inner Membrane Protein | 1,14 | 1,22 | -2,29 |
| SL0895 | <i>cydD</i> | ATP-binding/permease protein <i>cydD</i> | 1,01 | -1,03 | -2,02 |
| SL0909 | <i>sopD2</i> | Secreted effector protein <i>sopD2</i> | -8,04 | 1,35 | -3,81 |
| SL0911 | <i>focA</i> | Probable formate transporter 1 | -1,06 | -1,08 | -7,51 |
| SL0912 | <i>ycaO</i> | UPF0142 protein <i>ycaO</i> | -1,14 | -1,04 | -2,38 |
| SL0917 | <i>cmk</i> | Cytidylate kinase | -1,13 | 1,12 | -2,16 |
| SL0921 | <i>msbA</i> | Lipid A export A IP-binding/permease protein <i>mshA</i> | -1,08 | -1,02 | -2,20 |
| SL0931 | <i>mukB</i> | Chromosome partition protein <i>mukB</i> | 1,03 | 1,14 | 2,29 |
| SL0936 | <i>ompF</i> | Outer membrane protein F | -1,25 | -1,04 | 7,42 |
| SL0939 | <i>dpaL</i> | Diaminopropionate ammonia-lyase | 1,26 | -1,27 | 3,64 |
| SL0940 | <i>yfIA</i> | putative transcriptional regulator, Lrp family | 1,28 | 1,08 | 3,99 |
| SL0948 | <i>ydaE</i> | Hypothetical | -2,04 | -1,32 | -1,12 |
| SL0949 | - | Hypothetical | -2,04 | -1,24 | -2,03 |
| SL0951 | <i>C1</i> | Gifsy-2 Prophage C1 Protein | -1,47 | 1,16 | -2,19 |
| SL0952 | <i>ydaU</i> | Gifsy-2 replication Protein O | -2,00 | -1,28 | -1,62 |
| SL0963 | - | Bacteriophage Protein | -1,44 | -1,22 | -2,18 |
| SL0965 | <i>gtgA</i> | putative bacteriophage encoded virulence protein | -1,87 | -1,12 | -2,25 |
| SL0966 | <i>nucD</i> | Probable lysozyme from lambdoid prophage DLP12 | -1,77 | -1,04 | -3,53 |
| SL0967 | <i>rzpD</i> | Putative Rz endopeptidase from lambdoid prophage DLP12 | -2,04 | -1,37 | -4,10 |
| SL0968 | - | Hypothetical | -2,15 | -1,28 | -3,14 |
| SL0969 | - | Phage Terminase Large Subunit | -1,39 | -1,38 | -2,08 |
| SL0973 | - | putative RecA/RadA recombinase | -2,06 | -1,33 | -2,53 |
| SL0974 | - | ATP-binding sugartransporter-like protein | -1,91 | -1,39 | -2,39 |
| SL0975 | - | Minor Tail Protein Z-Like | -1,91 | -1,36 | -2,19 |
| SL0979 | - | Minor Tail Protein | -1,52 | -1,14 | -2,27 |
| SL0984 | - | Phage Minor Tail Protein L | -1,39 | -1,24 | -2,05 |
| SL0987 | - | Hocificity Protein J | -1,70 | -1,15 | -2,37 |
| SL0988 | <i>stfQ</i> | Side tail fiber protein homolog from lambdoid prophage Qin | -1,78 | -1,55 | -2,71 |
| SL0989 | <i>ycdD</i> | Tail fiber assembly protein homolog from lambdoid prophage Fels-1 | -1,94 | -1,45 | -3,53 |
| SL0990 | - | Hypothetical (pseudo) | -2,79 | -1,68 | -6,38 |
| SL0993 | <i>yedK</i> | Uncharacterized protein <i>yedK</i> (gtgD) | -1,37 | -1,07 | -1,98 |
| SL0994 | - | Hypothetical | -1,83 | -1,71 | -3,96 |
| SL0995 | <i>gtgE</i> | Prophage Encoded Virulence Factor | -2,02 | -1,28 | -1,84 |
| SL0996 | <i>msgA</i> | Virulence protein <i>msgA</i> (gtgF) | -1,48 | -1,02 | -5,56 |
| SL0999 | <i>ycbW</i> | Uncharacterized protein <i>ycbW</i> | -1,29 | -1,11 | -3,12 |
| SL1000 | <i>ycbX</i> | Putative iron-sulfur protein | -1,07 | -1,09 | -2,33 |
| SL1012 | <i>yccR</i> | putative DNA transformation protein | 1,20 | 1,07 | 3,23 |
| SL1014 | <i>yccF</i> | Inner membrane protein <i>yccF</i> | 1,04 | -1,03 | -2,33 |
| SL1016 | <i>mgsA</i> | Methylglyoxal synthase | 1,08 | 1,22 | 2,85 |
| SL1018 | <i>yccU</i> | Uncharacterized protein <i>yccU</i> | 1,13 | 1,36 | 2,07 |
| SL1019 | <i>yccV</i> | putative inner membrane protein | 1,14 | 1,34 | 2,80 |
| SL1026 | <i>pipA</i> | Hypothetical | -1,63 | 1,10 | -3,52 |
| SL1027 | <i>pipB</i> | Secreted effector protein <i>pipB</i> | -2,78 | 1,16 | -16,02 |
| SL1028 | - | Inner Membrane Protein | -2,14 | -1,05 | -47,98 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL1029 | <i>pipC</i> | cell invasion protein | -1,10 | 1,11 | -8,91 |
| SL1030 | <i>sopB</i> | Inositol phosphate phosphatase sopB | -1,10 | -1,03 | -10,63 |
| SL1040 | <i>hpaG</i> | 4-hydroxyphenylacetate degradation bifunctional isomerase/decarboxylase | -1,05 | -1,11 | 7,56 |
| SL1041 | <i>hpcC</i> | 5-carboxymethyl-2-hydroxymuconate semialdehyde dehydrogenase | 1,01 | -1,10 | 7,23 |
| SL1042 | <i>hpcB</i> | 3,4-dihydroxyphenylacetate 2,3-dioxygenase | -1,01 | -1,16 | 6,00 |
| SL1043 | <i>hpcD</i> | 5-carboxymethyl-2-hydroxymuconate Delta-isomerase | -1,06 | -1,20 | 5,31 |
| SL1044 | <i>hpcG</i> | 2-oxo-hepta-3-ene-1,7-dioic acid hydratase | -1,17 | -1,78 | 3,18 |
| SL1045 | <i>hpcH</i> | 4-hydroxy-2-oxo-heptane-1,7-dioate aldolase | -1,41 | -2,00 | 3,02 |
| SL1046 | <i>hpaX</i> | putative 4-hydroxyphenylacetate permease | 1,13 | -1,13 | 3,69 |
| SL1049 | <i>iraM</i> | Anti-adapter protein iraM | -1,15 | 1,06 | -2,94 |
| SL1056 | <i>agp</i> | Glucose-1-phosphatase | 1,04 | 1,28 | 3,03 |
| SL1061 | - | Uncharacterized protein R02472 | 1,20 | 1,19 | 9,50 |
| SL1062 | <i>putA</i> | Bifunctional protein putA | 1,76 | 1,51 | 77,71 |
| SL1063 | <i>putP</i> | Sodium/proline symporter | 1,15 | -1,25 | 12,16 |
| SL1065 | <i>yfeT</i> | Uncharacterized HTH-type transcriptional regulator HI_0143 | -1,09 | -1,13 | -2,08 |
| SL1066 | <i>sglT</i> | Sodium/glucose cotransporter | 1,15 | -1,18 | 6,36 |
| SL1067 | <i>nanE1</i> | Putative N-acetylmannosamine-6-phosphate 2-epimerase 1 | 1,14 | 1,00 | 4,53 |
| SL1068 | <i>nanM</i> | N-acetylneuraminate epimerase | -1,44 | -1,77 | 4,04 |
| SL1069 | <i>yiiY</i> | Uncharacterized protein yiiY | -1,43 | -1,50 | 5,40 |
| SL1070 | <i>yjhB</i> | Putative metabolite transport protein yjhB | -1,31 | -1,41 | 2,42 |
| SL1077 | <i>csgF</i> | Curli production assembly/transport component csgF | 1,01 | 1,13 | 2,00 |
| SL1083 | <i>ymdA</i> | Uncharacterized protein ymdA | 1,05 | -1,09 | 3,20 |
| SL1086 | <i>mdoC</i> | Glucans biosynthesis protein C | 1,21 | 1,22 | -2,02 |
| SL1089 | <i>yceK</i> | Uncharacterized protein yceK | 1,14 | 1,08 | 2,17 |
| SL1090 | <i>msyB</i> | Acidic protein msyB | 1,23 | 1,20 | 2,50 |
| SL1092 | <i>htrB</i> | Lipid A biosynthesis lauroyl acyltransferase | -1,04 | -1,13 | -2,37 |
| SL1102 | <i>grxB</i> | Glutaredoxin-2 | 1,21 | 1,37 | 2,26 |
| SL1103 | <i>mdtH</i> | Multidrug resistance protein mdtH | 1,13 | 1,19 | -2,07 |
| SL1104 | <i>rimJ</i> | Ribosomal-protein-alanine acetyltransferase | 1,23 | 1,04 | 2,57 |
| SL1105 | <i>yceH</i> | UPF0502 protein yceH | 1,32 | 1,25 | 3,95 |
| SL1106 | <i>mviM</i> | Virulence factor mviM | 1,26 | 1,13 | 2,46 |
| SL1107 | <i>mviN</i> | Virulence factor mviN | 1,22 | 1,13 | -2,09 |
| SL1110 | <i>flgA</i> | Flagella basal body P-ring formation protein flgA | 1,52 | 1,11 | 3,45 |
| SL1115 | <i>flgF</i> | Flagellar basal-body rod protein flgF | 1,06 | -1,01 | 2,09 |
| SL1116 | <i>flgG</i> | Flagellar basal-body rod protein flgG | 1,03 | 1,01 | 2,14 |
| SL1120 | <i>flgK</i> | Flagellar hook-associated protein 1 | -1,10 | 1,09 | -2,64 |
| SL1129 | <i>plsX</i> | Phosphate acyltransferase | -1,11 | -1,30 | -4,72 |
| SL1130 | <i>fabH</i> | 3-oxoacyl-[acyl-carrier-protein] synthase 3 | 1,17 | -1,08 | -2,12 |
| SL1151 | <i>bhsA</i> | Multiple stress resistance protein BhsA | 1,06 | 1,26 | -2,12 |
| SL1154 | <i>lolC</i> | Lipoprotein-releasing system transmembrane protein lolC | 1,20 | 1,01 | -2,02 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL1160 | <i>potC</i> | Spermidine/putrescine transport system permease protein potC | -1,49 | -1,06 | -2,92 |
| SL1161 | <i>sifA</i> | Secreted effector protein sifA | -15,51 | -1,07 | -3,57 |
| SL1168 | <i>phoQ</i> | Virulence sensor histidine kinase phoQ | -1,28 | -1,16 | -2,17 |
| SL1172 | <i>trmU</i> | tRNA-specific 2-thiouridylase mnmA | 1,06 | 1,12 | -2,25 |
| SL1176 | <i>icdA</i> | Isocitrate dehydrogenase [NADP] | -1,06 | -1,25 | 3,29 |
| SL1177 | - | Bacteriophage Protein | -2,96 | 1,17 | -25,20 |
| SL1178 | - | Hypothetical Protein SL1178 | -2,75 | 1,66 | -7,87 |
| SL1179 | <i>envF</i> | Probable lipoprotein envF | -1,32 | 1,19 | -2,17 |
| SL1180 | <i>msgA</i> | Virulence protein msgA | -1,13 | 1,20 | -2,85 |
| SL1181 | <i>envE</i> | Probable lipoprotein envE | -1,28 | 1,13 | -3,82 |
| SL1182 | <i>cspH</i> | Cold shock-like protein cspH | -1,05 | 1,31 | -3,33 |
| SL1183 | <i>pagD</i> | Virulence protein pagD | -2,53 | 1,62 | -6,00 |
| SL1184 | <i>pagC</i> | Virulence membrane protein pagC | -2,42 | 1,32 | -11,99 |
| SL1186 | - | Hypothetical | -1,47 | 1,10 | -4,22 |
| SL1189 | <i>yodB</i> | Cytochrome b561 homolog 1 | -1,39 | -1,02 | -2,27 |
| SL1191 | <i>xp55</i> | Protein XP55 | 1,49 | -1,02 | 3,96 |
| SL1192 | <i>dppB</i> | Putative peptide transport system permease protein BMEII0209 | 1,22 | -1,42 | 2,88 |
| SL1194 | <i>nikD</i> | Nickel import ATP-binding protein NikD | 1,11 | -1,20 | 2,65 |
| SL1198 | <i>yodA</i> | Metal-binding protein yodA | 1,34 | 1,13 | 2,48 |
| SL1201 | <i>ycgE</i> | Uncharacterized HTH-type transcriptional regulator ycgE | -1,06 | 1,11 | -2,37 |
| SL1204 | <i>aroQ</i> | Monofunctional chorismate mutase | -2,19 | 1,16 | -3,35 |
| SL1205 | <i>leuE</i> | Leucine efflux protein | -1,32 | -1,11 | -2,13 |
| SL1216 | <i>yeaL</i> | UPF0756 membrane protein yeaL | 1,06 | -1,06 | -2,55 |
| SL1217 | <i>yeaK</i> | Uncharacterized protein yeaK | -1,21 | -1,22 | -2,37 |
| SL1218 | <i>yeaJ</i> | Putative diguanylate cyclase YeaJ | 1,01 | -1,01 | -3,03 |
| SL1220 | <i>yeaG</i> | Uncharacterized protein yeaG | 1,08 | 1,16 | 2,00 |
| SL1226 | <i>msrB</i> | Peptide methionine sulfoxide reductase msrB | 1,03 | -1,04 | 2,56 |
| SL1227 | <i>yeaC</i> | Uncharacterized protein yeaC | 1,32 | 1,05 | 3,00 |
| SL1236 | <i>nudG</i> | CTP pyrophosphohydrolase | -1,29 | 1,22 | -2,76 |
| SL1237 | <i>xthA</i> | Exodeoxyribonuclease III | -1,03 | -1,08 | -2,28 |
| SL1238 | <i>astC</i> | Succinylornithine transaminase | -1,30 | -1,41 | 43,62 |
| SL1239 | <i>astA</i> | Arginine N-succinyltransferase | -1,37 | -2,03 | 26,67 |
| SL1240 | <i>astD</i> | N-succinylglutamate 5-semialdehyde dehydrogenase | -1,43 | -1,74 | 23,23 |
| SL1241 | <i>astB</i> | N-succinylarginine dihydrolase | -1,35 | -1,81 | 14,27 |
| SL1242 | <i>astE</i> | Succinylglutamate desuccinylase | -1,19 | -2,02 | 8,31 |
| SL1243 | <i>spy</i> | Spheroplast protein Y | -1,08 | 1,19 | 2,21 |
| SL1247 | <i>celA</i> | N,N'-diacetylchitobiose-specific phosphotransferase enzyme IIB component | -1,10 | -1,11 | 2,05 |
| SL1248 | <i>celB</i> | N,N'-diacetylchitobiose permease IIC component | 1,03 | -1,15 | 2,19 |
| SL1255 | <i>ydjN</i> | Uncharacterized symporter ydjN | -1,04 | 1,01 | 3,28 |
| SL1259 | <i>yniA</i> | Uncharacterized protein yniA | 1,23 | 1,38 | 3,45 |
| SL1261 | <i>pfkB</i> | 6-phosphofructokinase isozyme 2 | 1,16 | 1,13 | 2,15 |
| SL1262 | <i>ydiY</i> | Uncharacterized protein ydiY | -1,13 | 1,09 | -3,05 |
| SL1263 | - | Hypothetical | -1,90 | -1,40 | -12,64 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-------------------|-------------------|-----------------------|
| SL1264 | - | DNA/RNA Non-Specific Endonuclease | -2,17 | 1,18 | -7,63 |
| SL1265 | <i>nucA</i> | Nuclease | -2,21 | 1,00 | -13,64 |
| SL1266 | <i>rfc</i> | O-antigen polymerase | -1,22 | 1,02 | -2,41 |
| SL1278 | <i>cdgR</i> | Cyclic di-GMP regulator cdgR | -1,08 | 1,07 | -2,05 |
| SL1283 | <i>ppsA</i> | Phosphoenolpyruvate synthase | 1,03 | -1,18 | 4,30 |
| SL1287 | <i>ydiR</i> | Putative electron transfer flavoprotein subunit ydiR | -1,32 | 1,23 | -2,22 |
| SL1291 | <i>ydiF</i> | Uncharacterized protein ydiF | 1,35 | 1,01 | 4,23 |
| SL1292 | <i>aroD</i> | 3-dehydroquinate dehydratase | 1,21 | 1,04 | 2,37 |
| SL1293 | <i>ydiB</i> | Quinate/shikimate dehydrogenase | -1,06 | -1,22 | 2,17 |
| SL1294 | <i>ydiN</i> | Inner membrane transport protein ydiN | 1,50 | 1,58 | -2,01 |
| SL1297 | <i>ydiL</i> | Uncharacterized protein ydiL | 1,38 | 1,15 | -2,44 |
| SL1302 | <i>ydjN</i> | Uncharacterized symporter ydjN | 1,07 | -1,02 | 6,96 |
| SL1303 | <i>sufA</i> | Protein sufA | 1,22 | 1,43 | 4,08 |
| SL1304 | <i>sufB</i> | FeS cluster assembly protein sufB | 1,17 | 1,13 | 2,10 |
| SL1309 | <i>ynhG</i> | Probable L,D-transpeptidase YnhG | 1,25 | 1,14 | 2,90 |
| SL1313 | <i>puuP</i> | Putrescine importer | -1,06 | -1,08 | 4,25 |
| SL1314 | <i>pip</i> | Proline iminopeptidase | -1,21 | -1,35 | 4,08 |
| SL1315 | - | Hypothetical | -1,21 | -1,22 | 3,97 |
| SL1316 | <i>rbsK</i> | Ribokinase | -1,13 | -1,17 | 8,68 |
| SL1317 | <i>ttrA</i> | tetrathionate reductase subunit A | 1,20 | 1,42 | -2,14 |
| SL1318 | <i>ttrC</i> | Tetrathionate Reductase Subunit C | 1,05 | 1,47 | -2,98 |
| SL1319 | <i>ttrB</i> | Tetrathionate Reductase Subunit B | 1,01 | 1,19 | -2,70 |
| SL1320 | <i>ttrS</i> | Sensor protein | 1,42 | 1,12 | 2,21 |
| SL1323 | <i>ybgA</i> | Uncharacterized protein ybgA | 1,18 | 1,12 | 2,23 |
| SL1324 | <i>mlrA</i> | HTH-type transcriptional regulator mlrA | -1,84 | -1,14 | -2,75 |
| SL1325 | <i>ssrB</i> | putative two-component response regulator | -2,38 | 1,26 | -2,58 |
| SL1326 | <i>spiR</i> | Sensor kinase protein | -3,42 | -1,01 | -2,56 |
| SL1327 | <i>spiC</i> | Salmonella pathogenicity island protein C | -7,40 | 1,89 | -7,03 |
| SL1328 | <i>spiA</i> | Yop proteins translocation protein C | -8,81 | 1,31 | -6,06 |
| SL1329 | <i>ssaD</i> | Type-III Secretion Protein | -5,18 | -1,04 | -7,92 |
| SL1330 | - | Secretion System Protein | -4,91 | 1,17 | -4,88 |
| SL1331 | <i>sseA</i> | Type III secretion system chaperone sseA | -7,73 | 1,49 | -3,08 |
| SL1332 | <i>sseB</i> | Secreted effector protein sseB | -6,60 | 1,31 | -2,69 |
| SL1333 | <i>sscA</i> | Type III Secretion Low Calcium Response Chaperone LcrH/SycD | -5,68 | 1,13 | -2,44 |
| SL1334 | <i>sseC</i> | Secreted effector protein sseC | -6,74 | 1,15 | -2,37 |
| SL1335 | <i>sseD</i> | Secreted effector protein sseD | -5,29 | 1,33 | -1,44 |
| SL1336 | <i>sseE</i> | Secreted Effector Protein | -4,59 | 1,21 | -1,28 |
| SL1337 | <i>sscB</i> | Type III Secretion Chaperone | -5,73 | 1,14 | -1,55 |
| SL1338 | <i>sseF</i> | Hypothetical | -2,64 | -1,03 | -1,30 |
| SL1339 | <i>sseG</i> | Hypothetical | -2,53 | -1,17 | -1,36 |
| SL1340 | <i>ssaG</i> | Secretion System Apparatus SsaG | -4,80 | 1,60 | -1,67 |
| SL1341 | <i>ssaH</i> | Hypothetical | -14,29 | 1,75 | -18,14 |
| SL1342 | <i>ssal</i> | Type III Secretion System Apparatus Protein | -14,52 | 1,76 | -22,27 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-------------------|-------------------|-----------------------|
| SL1343 | <i>ssaJ</i> | Secretion system apparatus lipoprotein <i>ssaJ</i> | -15,99 | 1,46 | -17,00 |
| SL1344 | - | Type III Secretion Apparatus | -11,83 | 1,31 | -16,48 |
| SL1345 | <i>ssaK</i> | Secretion system apparatus protein <i>ssaK</i> | -11,43 | 1,32 | -11,64 |
| SL1346 | <i>ssaL</i> | Secretion system apparatus protein <i>ssaL</i> | -8,55 | 1,37 | -5,60 |
| SL1347 | <i>ssaM</i> | Secretion system apparatus protein <i>ssaM</i> | -8,23 | 1,24 | -5,75 |
| SL1348 | <i>ssaV</i> | Secretion system apparatus protein <i>ssaV</i> | -2,98 | 1,24 | -1,41 |
| SL1349 | <i>ssaN</i> | Probable secretion system apparatus ATP synthase <i>ssaN</i> | -3,19 | 1,27 | 1,14 |
| SL1350 | <i>ssaO</i> | Secretion system apparatus protein <i>ssaO</i> | -3,52 | 1,44 | 1,32 |
| SL1351 | <i>ssaP</i> | Secretion system apparatus protein <i>ssaP</i> | -2,62 | 1,21 | -1,05 |
| SL1352 | <i>ssaQ</i> | Secretion system apparatus protein <i>SsaQ</i> | -2,23 | 1,24 | 1,11 |
| SL1353 | <i>yscR</i> | Virulence protein <i>yscR</i> | -8,10 | 1,79 | -4,01 |
| SL1354 | <i>ssaS</i> | Secretion system apparatus protein <i>SsaS</i> | -11,20 | 1,36 | -6,62 |
| SL1355 | <i>ssaT</i> | Secretion system apparatus protein <i>ssaT</i> | -4,96 | 1,26 | -4,28 |
| SL1360 | <i>ydhC</i> | Inner membrane transport protein <i>ydhC</i> | -1,19 | -1,07 | -24,59 |
| SL1364 | <i>ydhO</i> | Uncharacterized protein <i>ydhO</i> | -1,19 | 1,04 | -2,16 |
| SL1366 | <i>rnt</i> | Ribonuclease T | 1,06 | -1,20 | -2,27 |
| SL1376 | <i>slyA</i> | Transcriptional regulator <i>slyA</i> | -1,20 | 1,17 | -2,26 |
| SL1380 | <i>pdxH</i> | Pyridoxine/pyridoxamine 5'-phosphate oxidase | 1,10 | 1,04 | -2,30 |
| SL1383 | <i>gst</i> | Glutathione S-transferase | 1,30 | 1,18 | 2,14 |
| SL1391 | <i>rnfA</i> | Electron transport complex protein <i>rnfA</i> | 1,23 | 1,06 | -2,32 |
| SL1392 | <i>ydgK</i> | Inner membrane protein <i>ydgK</i> | -1,11 | -1,15 | -2,54 |
| SL1393 | <i>cnu</i> | OriC-binding nucleoid-associated protein | -1,19 | 1,07 | -2,33 |
| SL1395 | <i>add</i> | Adenosine deaminase | -2,04 | 1,21 | -2,80 |
| SL1398 | <i>fumA</i> | Fumarate hydratase class I, aerobic | 1,13 | -1,26 | 5,66 |
| SL1399 | - | Hypothetical Protein SL1399 | 1,53 | 1,02 | 7,56 |
| SL1400 | <i>fumC</i> | Fumarate hydratase class II | 1,16 | 1,05 | 4,75 |
| SL1401 | <i>tus</i> | DNA replication terminus site-binding protein | 1,35 | 1,09 | 3,56 |
| SL1404 | <i>ompN</i> | Outer membrane protein N | -1,25 | 1,15 | 2,01 |
| SL1405 | <i>rstA</i> | Transcriptional regulatory protein <i>rstA</i> | -1,14 | 1,08 | -3,50 |
| SL1414 | <i>ydgD</i> | Uncharacterized serine protease <i>ydgD</i> | 1,06 | 1,04 | 2,11 |
| SL1421 | <i>opuBA</i> | Choline transport ATP-binding protein <i>opuBA</i> | 1,03 | 1,04 | 2,73 |
| SL1422 | <i>opuCB</i> | Glycine betaine/carnitine/choline transport system permease protein <i>opuCB</i> | 1,01 | -1,06 | 3,34 |
| SL1423 | <i>opuCC</i> | Glycine betaine/carnitine/choline-binding protein | 1,02 | -1,08 | 4,59 |
| SL1424 | <i>opuCB</i> | Glycine betaine/carnitine/choline transport system permease protein <i>opuCB</i> | -1,00 | -1,03 | 3,48 |
| SL1425 | <i>dmsD</i> | Twin-arginine leader-binding protein <i>dmsD</i> | 1,18 | -1,01 | -2,00 |
| SL1435 | <i>rspA</i> | Starvation-sensing protein <i>rspA</i> | -1,55 | -1,73 | 7,90 |
| SL1436 | <i>rspB</i> | Starvation-sensing protein <i>rspB</i> | -1,23 | -1,45 | 8,06 |
| SL1437 | <i>ydfJ</i> | Putative inner membrane metabolite transport protein <i>ydfJ</i> | -1,19 | -1,35 | 4,11 |
| SL1443 | <i>ymdF</i> | Uncharacterized protein <i>ymdF</i> | -1,27 | 1,29 | -2,06 |
| SL1452 | <i>sotB</i> | Probable sugar efflux transporter | 1,14 | 1,36 | -3,01 |
| SL1454 | <i>yneI</i> | Aldehyde dehydrogenase-like protein <i>yneI</i> | -1,03 | 1,04 | -2,65 |
| SL1455 | <i>glsA2</i> | Glutaminase 2 | 1,01 | -1,08 | -2,29 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL1457 | <i>yneE</i> | UPF0187 protein yneE | -1,08 | 1,01 | -2,75 |
| SL1459 | <i>ompC</i> | Outer membrane protein C | -1,17 | 1,00 | 2,18 |
| SL1466 | <i>hupZ</i> | Probable Ni/Fe-hydrogenase B-type cytochrome subunit | -1,22 | -1,24 | 2,79 |
| SL1467 | <i>hupB</i> | Uptake hydrogenase large subunit | -1,17 | -1,17 | 3,66 |
| SL1468 | <i>hoxK</i> | Uptake hydrogenase small subunit | -1,12 | -1,13 | 2,86 |
| SL1471 | <i>rspB</i> | Uncharacterized zinc-type alcohol dehydrogenase-like protein HI_0053 | -1,46 | -1,07 | 2,30 |
| SL1472 | <i>exuT</i> | Hexuronate transporter | -1,63 | -1,16 | 3,48 |
| SL1473 | <i>pqaA</i> | PhoPQ-activated protein | -2,52 | 1,11 | -3,72 |
| SL1475 | <i>yhjG</i> | Uncharacterized aromatic compound monooxygenase yhjG | -1,14 | -1,35 | 3,46 |
| SL1476 | - | MarR Family Transcriptional Regulator | -1,08 | -1,08 | 2,15 |
| SL1477 | <i>queA</i> | S-adenosylmethionine:tRNA ribosyltransferase-isomerase | -1,49 | 1,25 | -1,99 |
| SL1484 | - | Coiled-Coil Protein | -1,18 | -2,93 | -1,44 |
| SL1486 | - | Uncharacterized Na(+)/H(+) antiporter HI_1107 | 1,17 | -1,49 | 2,21 |
| SL1489 | <i>treY</i> | Maltooligosyl trehalose synthase | 1,42 | 1,24 | 3,14 |
| SL1494 | <i>bdm</i> | Protein bdm homolog | -1,04 | 1,05 | -4,02 |
| SL1496 | <i>sfcA</i> | NAD-dependent malic enzyme | 1,20 | -1,33 | 2,28 |
| SL1505 | <i>smvA</i> | Methyl viologen resistance protein smvA | -1,22 | -1,29 | -2,99 |
| SL1507 | <i>narU</i> | Nitrite extrusion protein 2 | 1,27 | 1,03 | 11,11 |
| SL1508 | <i>narZ</i> | Respiratory nitrate reductase 2 alpha chain | 1,02 | 1,04 | 6,46 |
| SL1509 | <i>narY</i> | Respiratory nitrate reductase 2 beta chain | -1,04 | 1,09 | 5,04 |
| SL1510 | <i>narW</i> | Probable nitrate reductase molybdenum cofactor assembly chaperone NarW | 1,11 | 1,04 | 4,15 |
| SL1511 | <i>narV</i> | Respiratory nitrate reductase 2 gamma chain | 1,08 | 1,07 | 4,38 |
| SL1513 | <i>nhoA</i> | N-hydroxyarylamine O-acetyltransferase | -1,08 | -1,04 | -2,40 |
| SL1525 | <i>srfB</i> | Virulence Protein SrfB | 1,49 | -1,02 | 4,34 |
| SL1526 | <i>srfC</i> | Virulence Factor | 1,42 | -1,05 | 2,39 |
| SL1528 | <i>ydcW</i> | Gamma-aminobutyraldehyde dehydrogenase | 1,09 | 1,11 | 2,33 |
| SL1531 | <i>ugtL</i> | D-Alanyl-D-Alanine Dipeptidase | -2,42 | 1,47 | -4,95 |
| SL1532 | <i>sifB</i> | Secreted effector protein sifB | -6,21 | 1,85 | -3,28 |
| SL1533 | <i>yncJ</i> | Uncharacterized protein yncJ | -4,14 | 1,63 | -2,28 |
| SL1537 | <i>ydcL</i> | Uncharacterized lipoprotein ydcL | 1,44 | -1,04 | 2,52 |
| SL1540 | <i>ydcK</i> | Uncharacterized acetyltransferase ydcK | 1,13 | -1,14 | 2,24 |
| SL1541 | <i>rimL</i> | Ribosomal-protein-serine acetyltransferase | 1,16 | 1,11 | 2,07 |
| SL1542 | <i>sgcX</i> | Putative aminopeptidase sgcX | 1,37 | 1,22 | 2,48 |
| SL1543 | <i>sgcB</i> | Putative phosphotransferase enzyme IIB component sgcB | 1,16 | 1,24 | 2,02 |
| SL1544 | <i>sgcC</i> | Putative permease IIC component | 1,24 | 1,20 | 2,09 |
| SL1551 | <i>yceI</i> | UPF0312 protein VPA0850 | 1,36 | 1,06 | 2,34 |
| SL1553 | <i>pnbA</i> | Para-nitrobenzyl esterase | 1,36 | -1,32 | 3,07 |
| SL1554 | <i>ydcJ</i> | Uncharacterized protein ydcJ | 1,30 | 1,10 | 9,60 |
| SL1559 | <i>steB</i> | Secreted effector protein steB | -1,78 | 1,43 | -16,75 |
| SL1560 | <i>tfpB</i> | Protein tfpB | -1,29 | 1,88 | -2,37 |
| SL1561 | <i>sseJ</i> | Secreted effector protein sseJ | -4,43 | 1,67 | -2,52 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-----------------------|-----------------------|---------------------------|
| SL1562 | - | Hypothetical | -1,22 | 1,44 | -2,15 |
| SL1564 | <i>yecS</i> | Inner membrane amino-acid ABC transporter permease protein <i>yecS</i> | -1,20 | 1,15 | -2,41 |
| SL1567 | - | Hypothetical | -1,43 | 1,20 | -1,98 |
| SL1570 | <i>ydcF</i> | Protein <i>ydcF</i> | 1,23 | 1,09 | 2,05 |
| SL1578 | <i>hslJ</i> | Heat shock protein <i>hslJ</i> | 1,22 | 1,18 | -2,04 |
| SL1582 | <i>uspF</i> | Universal stress protein F | 1,10 | 1,34 | 2,66 |
| SL1592 | <i>uspE</i> | Universal stress protein E | 1,17 | 1,34 | 2,28 |
| SL1593 | <i>ynaJ</i> | Uncharacterized protein <i>ynaJ</i> | 1,25 | 1,00 | 2,94 |
| SL1602 | - | Hypothetical | -1,76 | 1,08 | -4,92 |
| SL1607 | <i>yhjC</i> | Uncharacterized HTH-type transcriptional regulator <i>yhjC</i> | 1,09 | 1,08 | 2,41 |
| SL1612 | <i>tpx</i> | Probable thiol peroxidase | -1,28 | -1,22 | 2,53 |
| SL1617 | <i>pspD</i> | Phage shock protein D | -1,19 | 1,34 | -2,02 |
| SL1619 | <i>pspB</i> | Phage shock protein B | -1,15 | 1,34 | -2,10 |
| SL1621 | <i>pspF</i> | Psp operon transcriptional activator | 1,09 | -1,00 | 2,78 |
| SL1628 | <i>steC</i> | Secreted effector kinase <i>steC</i> | -5,23 | 1,46 | -2,62 |
| SL1634 | <i>yciR</i> | putative PAS/PAC domain protein | 1,07 | 1,04 | 2,42 |
| SL1637 | <i>osmB</i> | Osmotically-inducible lipoprotein B | -1,30 | 1,02 | -4,73 |
| SL1639 | <i>pyrF</i> | Orotidine 5'-phosphate decarboxylase | -1,46 | 1,05 | -2,53 |
| SL1640 | <i>yciM</i> | Uncharacterized protein <i>yciM</i> | -1,08 | 1,06 | -2,25 |
| SL1644 | <i>acnA</i> | Aconitate hydratase 1 | 1,18 | 1,02 | 3,38 |
| SL1650 | <i>btuR</i> | Cob(I)yrinic acid a,c-diamide adenosyltransferase | 1,19 | -1,12 | 2,90 |
| SL1655 | <i>trpD</i> | Anthranilate synthase component II | -1,04 | 1,09 | 2,35 |
| SL1659 | <i>ymdF</i> | Uncharacterized protein <i>ymdF</i> | -1,55 | 1,10 | -3,54 |
| SL1660 | <i>yciF</i> | Protein <i>yciF</i> | -1,73 | 1,18 | -3,65 |
| SL1661 | <i>yciE</i> | Protein <i>yciE</i> | -1,42 | 1,25 | -3,21 |
| SL1662 | <i>katN</i> | Probable manganese catalase | -1,31 | 1,20 | -2,83 |
| SL1666 | <i>ispZ</i> | Probable intracellular septation protein | -1,19 | -1,16 | -2,06 |
| SL1668 | <i>tonB</i> | Protein <i>tonB</i> | 1,07 | 1,31 | -2,20 |
| SL1673 | <i>oppF</i> | Oligopeptide transport ATP-binding protein <i>oppF</i> | 1,18 | 1,00 | 2,57 |
| SL1676 | <i>oppB</i> | Oligopeptide transport system permease protein <i>oppB</i> | -1,10 | -1,72 | 2,18 |
| SL1677 | <i>oppA</i> | Periplasmic oligopeptide-binding protein | -1,05 | -1,22 | 3,54 |
| SL1678 | - | Hypothetical | -1,01 | 1,01 | 1,98 |
| SL1679 | <i>ychE</i> | UPF0056 membrane protein <i>ychE</i> | -1,34 | 1,25 | -3,72 |
| SL1689 | <i>narI</i> | Respiratory nitrate reductase 1 gamma chain | 1,04 | 1,24 | 2,45 |
| SL1690 | <i>narJ</i> | Nitrate reductase molybdenum cofactor assembly chaperone <i>NarJ</i> | 1,11 | 1,01 | 2,43 |
| SL1691 | <i>narH</i> | Respiratory nitrate reductase 1 beta chain | 1,08 | 1,23 | 2,12 |
| SL1692 | <i>narG</i> | Respiratory nitrate reductase 1 alpha chain | 1,06 | 1,07 | 2,24 |
| SL1696 | <i>ychO</i> | Uncharacterized protein <i>ychO</i> | -1,07 | -1,09 | -2,00 |
| SL1702 | <i>sirB2</i> | Protein <i>sirB2</i> | 1,48 | -1,03 | -2,42 |
| SL1703 | <i>hemK</i> | Protein methyltransferase <i>hemK</i> | 1,30 | -1,09 | -2,25 |
| SL1704 | <i>prfA</i> | Peptide chain release factor 1 | 1,21 | 1,09 | -2,31 |
| SL1706 | <i>lolB</i> | Outer-membrane lipoprotein <i>lolB</i> | -1,13 | -1,15 | -2,18 |
| SL1710 | <i>ychH</i> | Uncharacterized protein <i>ychH</i> | 1,38 | 1,30 | 3,18 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL1714 | <i>hyaA</i> | Hydrogenase-1 small chain | -1,30 | -2,04 | -2,23 |
| SL1723 | <i>gdhA</i> | Glutamate dehydrogenase | 1,13 | -1,42 | 17,53 |
| SL1724 | <i>treA</i> | Periplasmic trehalase | 1,22 | 1,12 | 2,95 |
| SL1726 | <i>ycgR</i> | Flagellar brake protein YcgR | -1,35 | 1,14 | -5,01 |
| SL1727 | <i>emtA</i> | Endo-type membrane-bound lytic murein transglycosylase A | 1,00 | 1,06 | -2,10 |
| SL1727 | <i>emtA</i> | Endo-type membrane-bound lytic murein transglycosylase A | 1,00 | 1,06 | -2,10 |
| SL1729 | <i>cvrA</i> | Cell volume regulation protein A | -1,03 | 1,01 | -2,77 |
| SL1730 | <i>dadX</i> | Alanine racemase, catabolic | -1,27 | -1,83 | 6,94 |
| SL1731 | <i>dadA</i> | D-amino acid dehydrogenase small subunit | -1,36 | -1,36 | 9,25 |
| SL1732 | <i>ycgB</i> | Uncharacterized protein ycgB | -1,06 | 1,21 | 2,94 |
| SL1735 | <i>dsbB</i> | Disulfide bond formation protein B | 1,07 | -1,14 | -2,28 |
| SL1737 | <i>gns</i> | Protein gns | 1,34 | 1,53 | 2,78 |
| SL1742 | <i>minC</i> | Probable septum site-determining protein minC | -1,29 | -1,16 | -4,10 |
| SL1748 | <i>yeaY</i> | Uncharacterized lipoprotein yeaY | -1,02 | 1,19 | -2,20 |
| SL1749 | <i>yeaZ</i> | M22 peptidase homolog yeaZ | -1,33 | -1,49 | -2,27 |
| SL1761 | <i>manZ</i> | Mannose permease IID component | 1,46 | 1,17 | -2,11 |
| SL1762 | <i>yobD</i> | UPF0266 membrane protein yobD | 1,13 | -1,35 | -5,91 |
| SL1763 | <i>yebN</i> | UPF0059 membrane protein CKO_01156 | 1,08 | -1,35 | -2,84 |
| SL1768 | <i>yebO</i> | Uncharacterized protein yebO | -1,07 | 1,12 | -3,12 |
| SL1769 | <i>mgrB</i> | Protein mgrB | 1,02 | 1,21 | -3,11 |
| SL1770 | <i>yobH</i> | Uncharacterized protein yobH | -1,09 | 1,05 | -2,58 |
| SL1779 | <i>yebU</i> | Ribosomal RNA small subunit methyltransferase F | 1,12 | 1,03 | -2,70 |
| SL1780 | <i>yebV</i> | Uncharacterized protein yebV | -1,01 | 1,16 | -2,02 |
| SL1782 | <i>pphA</i> | Serine/threonine-protein phosphatase 1 | -1,24 | 1,06 | -4,92 |
| SL1783 | - | Hypothetical | -1,31 | 1,41 | -8,58 |
| SL1784 | <i>sopE2</i> | Guanine nucleotide exchange factor sopE2 | -1,51 | 1,15 | -16,49 |
| SL1785 | <i>ycgX</i> | Uncharacterized protein ycgX | -1,44 | 1,14 | -6,12 |
| SL1786 | - | Hypothetical | 1,03 | 1,09 | -2,05 |
| SL1793 | <i>pagO</i> | Protein pagO | -1,97 | 1,23 | -5,37 |
| SL1794 | - | Hypothetical | -2,21 | 1,11 | -7,65 |
| SL1795 | - | Hypothetical | -1,97 | 1,32 | -5,78 |
| SL1799 | <i>pagK</i> | bacteriophage encoded pagK (phoPQ-activated protein) | -2,12 | 1,45 | -4,28 |
| SL1800 | <i>ycdD</i> | Tail fiber assembly protein homolog from lambdoid prophage Fels-1 | -1,84 | -1,23 | -2,96 |
| SL1804 | - | Hypothetical | -1,63 | -1,36 | -3,58 |
| SL1806 | <i>intE</i> | Prophage lambda integrase | 1,05 | 1,01 | 2,88 |
| SL1819 | <i>edd</i> | Phosphogluconate dehydratase | -1,05 | -1,08 | -5,50 |
| SL1821 | <i>hexR</i> | HTH-type transcriptional regulator hexR | 1,07 | 1,06 | 2,24 |
| SL1824 | <i>yebA</i> | Uncharacterized metalloprotease yebA | -1,16 | -1,12 | -2,29 |
| SL1840 | <i>cmoA</i> | tRNA (cmo5U34)-methyltransferase | -1,01 | -1,08 | -2,10 |
| SL1844 | <i>argS</i> | Arginyl-tRNA synthetase | -1,23 | 1,04 | -3,31 |
| SL1850 | <i>cheZ</i> | Chemotaxis protein cheZ | -1,01 | 1,09 | -2,12 |
| SL1851 | <i>cheY</i> | Chemotaxis protein cheY | -1,01 | 1,11 | -2,17 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL1852 | <i>cheB</i> | Chemotaxis response regulator protein-glutamate methyltransferase | -1,12 | 1,10 | -3,86 |
| SL1853 | <i>cheR</i> | Chemotaxis protein methyltransferase | -1,24 | 1,07 | -3,83 |
| SL1854 | <i>tar</i> | Methyl-accepting chemotaxis protein II | -1,20 | 1,07 | -2,19 |
| SL1857 | <i>motB</i> | Motility protein B | -1,29 | 1,06 | -2,99 |
| SL1858 | <i>motA</i> | Motility protein A | -1,20 | 1,23 | -3,31 |
| SL1859 | <i>flhC</i> | Flagellar transcriptional activator flhC | -1,22 | 1,15 | -3,09 |
| SL1860 | <i>flhD</i> | Transcriptional activator FlhD | -1,28 | 1,09 | -3,17 |
| SL1865 | <i>ftnB</i> | Ferritin-like protein 2 | 1,16 | 1,07 | 3,10 |
| SL1870 | <i>tyrP</i> | Tyrosine-specific transport protein | 1,44 | 1,12 | -1,98 |
| SL1872 | - | Hypothetical | -1,40 | 1,13 | -4,52 |
| SL1874 | - | Hypothetical | -1,90 | 1,19 | -4,78 |
| SL1876 | <i>uvrC</i> | UvrABC system protein C | 1,11 | -1,11 | -2,18 |
| SL1878 | <i>yecF</i> | Uncharacterized protein yecF | -1,09 | 1,13 | -8,87 |
| SL1879 | <i>sdiA</i> | Regulatory protein sdiA | -1,09 | 1,23 | -3,85 |
| SL1889 | <i>fliD</i> | Flagellar hook-associated protein 2 | -1,07 | 1,01 | -2,40 |
| SL1890 | <i>fliS</i> | Flagellar protein fliS | -1,30 | -1,22 | -3,14 |
| SL1891 | <i>fliT</i> | Flagellar protein fliT | -1,26 | -1,14 | -3,00 |
| SL1894 | <i>yedE</i> | UPF0394 inner membrane protein yedE | -1,04 | -1,08 | 3,86 |
| SL1895 | <i>yedF</i> | UPF0033 protein yedF | 1,16 | 1,05 | 3,15 |
| SL1896 | - | putative 50S ribosomal protein | -1,92 | -1,34 | -3,36 |
| SL1902 | <i>fliJ</i> | Flagellar fliJ protein | 1,20 | 1,30 | 2,04 |
| SL1911 | <i>rcsA</i> | Colanic acid capsular biosynthesis activation protein A | -1,16 | 1,36 | -2,52 |
| SL1922 | <i>yedR</i> | Inner membrane protein yedR | 1,03 | 1,36 | -4,09 |
| SL1923 | <i>ompS1</i> | Outer membrane protein S1 | 1,31 | 1,22 | 2,32 |
| SL1924 | <i>cspB</i> | Cold shock-like protein cspB | -1,53 | -1,31 | -2,11 |
| SL1928 | - | Cytoplasmic Protein | -5,33 | 1,56 | -7,81 |
| SL1933 | <i>ymfP</i> | Putative protein ymfP | -1,57 | -1,19 | -1,99 |
| SL1942 | - | Hypothetical | -1,72 | -1,22 | -2,95 |
| SL1943 | - | Hypothetical | -1,68 | -1,15 | -2,74 |
| SL1944 | - | Hypothetical | -1,59 | -1,10 | -2,55 |
| SL1945 | - | Hypothetical | -1,56 | -1,07 | -2,73 |
| SL1946 | - | Hypothetical | -1,66 | -1,10 | -2,68 |
| SL1949 | <i>ymfO</i> | Putative uncharacterized protein ymfO | -1,45 | -1,07 | -2,59 |
| SL1950 | <i>ymfN</i> | Uncharacterized protein ymfN | -1,38 | -1,14 | -3,34 |
| SL1951 | - | P27 Family Phage Terminase Small Subunit | -1,56 | -1,17 | -3,72 |
| SL1952 | - | Hypothetical | -1,58 | -1,12 | -3,08 |
| SL1953 | - | Hypothetical Protein SL1953 | -1,40 | -1,02 | -2,20 |
| SL1955 | <i>rzpD</i> | Putative Rz endopeptidase from lambdoid prophage DLP12 | -1,36 | -1,16 | -3,37 |
| SL1956 | - | Uncharacterized protein HI_1415 | -1,45 | -1,11 | -3,36 |
| SL1957 | - | Phage Holin Lambda Family | -1,42 | -1,12 | -3,53 |
| SL1961 | - | Hypothetical | -1,00 | 1,06 | 2,40 |
| SL1962 | <i>yfdM</i> | Putative uncharacterized protein yfdM | -1,19 | -1,23 | 2,13 |
| SL1963 | <i>yfdN</i> | Uncharacterized protein yfdN | -1,14 | -1,13 | 2,23 |
| SL1964 | <i>yfdO</i> | Hypothetical | -1,30 | -1,23 | 2,05 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | <i>greA</i> vs | <i>greB</i> vs | <i>greAgreB</i> |
|--------|-------------|--|----------------|----------------|-----------------|
| | | | WT | WT | vs WT |
| SL1968 | <i>yfdP</i> | Uncharacterized protein yfdP | -1,03 | 1,04 | 2,99 |
| SL1969 | <i>yfdQ</i> | Uncharacterized protein yfdQ | -1,17 | -1,09 | 3,27 |
| SL1970 | <i>yfdR</i> | Uncharacterized protein yfdR | -1,20 | -1,18 | 2,48 |
| SL1971 | - | Hypothetical | -1,18 | -1,23 | 2,22 |
| SL1972 | - | Hypothetical | -1,10 | -1,10 | 2,63 |
| SL1973 | - | Hypothetical | 1,03 | -1,30 | 2,66 |
| SL1975 | - | Phage Protein | -1,23 | -1,25 | 2,00 |
| SL1977 | <i>mtfA</i> | Protein mtfA | 1,31 | 1,30 | 2,90 |
| SL1993 | <i>cobS</i> | Cobalamin synthase | -1,01 | -1,29 | -2,17 |
| SL2006 | <i>cbiT</i> | Probable cobalt-precorrin-6Y C(15)-methyltransferase [decarboxylating] | 1,08 | 1,11 | -2,83 |
| SL2007 | <i>cbiE</i> | Probable cobalt-precorrin-6Y C(5)-methyltransferase | 1,12 | -1,05 | -3,51 |
| SL2008 | <i>cbiD</i> | Putative cobalt-precorrin-6A synthase [deacetylating] | 1,22 | 1,23 | -2,77 |
| SL2009 | <i>cbiC</i> | Cobalt-precorrin-8X methylmutase | 1,01 | 1,01 | -2,23 |
| SL2010 | <i>cbiB</i> | Cobalamin biosynthesis protein cbiB | 1,02 | 1,05 | -3,16 |
| SL2013 | <i>pduF</i> | Propanediol diffusion facilitator | 1,29 | 1,42 | -3,03 |
| SL2014 | <i>pduA</i> | Propanediol utilization protein pduA | -1,43 | 1,42 | -22,81 |
| SL2015 | <i>pduB</i> | Propanediol utilization protein pduB | -1,67 | 1,17 | -40,16 |
| SL2017 | <i>pduD</i> | Propanediol dehydratase medium subunit | -1,57 | -1,14 | -38,60 |
| SL2018 | <i>pduE</i> | Propanediol dehydratase small subunit | -1,75 | -1,25 | -66,46 |
| SL2019 | <i>pduG</i> | propanediol utilization protein | -1,77 | -1,18 | -53,01 |
| SL2020 | <i>pduH</i> | propanediol utilization protein | -1,85 | -1,16 | -77,87 |
| SL2021 | <i>pduJ</i> | propanediol utilization protein | -1,69 | -1,19 | -20,95 |
| SL2022 | <i>pduK</i> | propanediol utilization protein | -1,67 | -1,31 | -18,88 |
| SL2023 | <i>pduL</i> | propanediol utilization protein | -2,00 | -1,44 | -25,45 |
| SL2024 | <i>pduM</i> | propanediol utilization protein | -1,98 | -1,30 | -26,37 |
| SL2025 | <i>pduN</i> | propanediol utilization protein | -1,73 | -1,23 | -20,64 |
| SL2026 | <i>pduO</i> | propanediol utilization protein | -1,80 | -1,25 | -21,04 |
| SL2027 | <i>pduP</i> | putative CoA-dependent propionaldehyde dehydrogenase | -1,52 | -1,18 | -8,20 |
| SL2028 | <i>pduQ</i> | putative propanol dehydrogenase | -1,56 | -1,41 | -9,36 |
| SL2029 | <i>pduS</i> | propanediol utilization ferredoxin | -1,93 | -1,59 | -4,59 |
| SL2030 | <i>pduT</i> | putative propanediol utilization protein | -1,28 | -1,28 | -3,61 |
| SL2031 | <i>pduU</i> | putative propanediol utilization protein PduU | -1,53 | -1,36 | -4,09 |
| SL2032 | <i>pduV</i> | putative propanediol utilization protein PduV | -1,75 | -1,80 | -3,98 |
| SL2033 | <i>pduW</i> | Acetokinase | -1,52 | -1,24 | -3,31 |
| SL2034 | <i>pduX</i> | putative propanediol utilization protein | 1,42 | 1,08 | -2,41 |
| SL2037 | <i>gyrl</i> | DNA gyrase inhibitory protein homolog | 1,20 | 1,24 | 4,09 |
| SL2038 | <i>dacD</i> | D-alanyl-D-alanine carboxypeptidase dacD | 1,14 | -1,00 | -3,59 |
| SL2043 | <i>sopA</i> | E3 ubiquitin-protein ligase SopA | -1,29 | -1,17 | -11,05 |
| SL2049 | <i>hisD</i> | Histidinol dehydrogenase | 1,16 | -1,09 | 3,14 |
| SL2050 | <i>hisC</i> | Histidinol-phosphate aminotransferase | 1,27 | 1,00 | 3,41 |
| SL2051 | <i>hisB</i> | Histidine biosynthesis bifunctional protein hisB | 1,25 | -1,13 | 2,86 |
| SL2052 | <i>hisH</i> | Imidazole glycerol phosphate synthase subunit hisH | 1,21 | -1,23 | 2,78 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-------------------|-------------------|-----------------------|
| SL2053 | <i>hisA</i> | 1-(5-phosphoribosyl)-5-[(5-phosphoribosylamino)methylideneamino]imidazole-4-carboxamide isomerase | 1,22 | -1,18 | 2,60 |
| SL2054 | <i>hisF</i> | Imidazole glycerol phosphate synthase subunit hisF | 1,31 | -1,03 | 2,74 |
| SL2055 | <i>hisI</i> | Histidine biosynthesis bifunctional protein hisIE | 1,21 | -1,08 | 2,06 |
| SL2056 | <i>wzzB</i> | Chain length determinant protein | -1,51 | 1,00 | -6,76 |
| SL2057 | <i>udg</i> | UDP-glucose 6-dehydrogenase | -1,82 | 1,07 | -6,30 |
| SL2075 | <i>galF</i> | UTP--glucose-1-phosphate uridylyltransferase | 1,03 | 1,11 | -2,43 |
| SL2077 | <i>wcaL</i> | Putative colanic acid biosynthesis glycosyltransferase wcaL | 1,29 | -1,03 | 3,22 |
| SL2078 | <i>wcaK</i> | Colanic acid biosynthesis protein wcaK | 1,32 | 1,01 | 2,81 |
| SL2081 | <i>cpsG</i> | phosphomannomutase | 1,91 | 1,15 | 2,85 |
| SL2099 | <i>udk</i> | Uridine kinase | 1,19 | 1,20 | -2,45 |
| SL2107 | <i>baeS</i> | Signal transduction histidine-protein kinase BaeS | -1,25 | -1,02 | -2,13 |
| SL2112 | <i>yegQ</i> | Uncharacterized protease yegQ | -1,03 | 1,12 | -2,43 |
| SL2114 | <i>cesT</i> | Tir chaperone | -3,66 | 1,12 | -1,47 |
| SL2115 | - | Hypothetical | -4,46 | 1,33 | -2,96 |
| SL2119 | <i>yegT</i> | Putative nucleoside transporter yegT | -1,23 | -1,16 | 4,25 |
| SL2120 | <i>yegU</i> | Uncharacterized protein yegU | -1,16 | -1,12 | 2,62 |
| SL2121 | <i>yegV</i> | Uncharacterized sugar kinase yegV | -1,04 | 1,05 | 2,37 |
| SL2128 | <i>yehC</i> | Uncharacterized fimbrial chaperone yehC | 1,00 | -1,17 | -2,06 |
| SL2130 | <i>yehE</i> | Uncharacterized protein yehE | -1,84 | -1,06 | -15,13 |
| SL2135 | <i>yehS</i> | Uncharacterized protein yehS | 1,04 | -1,15 | -2,30 |
| SL2136 | <i>yehT</i> | Uncharacterized response regulatory protein yehT | 1,13 | 1,06 | 3,14 |
| SL2145 | <i>dld</i> | D-lactate dehydrogenase | 1,09 | -1,07 | 2,01 |
| SL2152 | <i>mhbM</i> | 3-hydroxybenzoate 6-hydroxylase | 1,16 | 1,06 | 2,31 |
| SL2153 | <i>maiA</i> | Probable maleylacetoacetate isomerase | 1,22 | 1,04 | 3,04 |
| SL2154 | <i>ycgM</i> | Uncharacterized protein PYRAB13970 | -1,01 | -1,03 | 3,97 |
| SL2155 | <i>gtdA</i> | Gentisate 1 2-Dioxygenase | 1,03 | 1,05 | 5,13 |
| SL2156 | <i>pcaK</i> | 4-hydroxybenzoate transporter | -1,10 | -1,02 | 2,29 |
| SL2157 | <i>gbpR</i> | HTH-type transcriptional regulator gbpR | -1,37 | -1,28 | 2,35 |
| SL2158 | <i>yohJ</i> | UPF0299 membrane protein CKO_00648 | 1,00 | 1,05 | -11,34 |
| SL2159 | <i>yohK</i> | Inner membrane protein yohK | 1,04 | -1,03 | -12,19 |
| SL2160 | <i>cdd</i> | Cytidine deaminase | 1,03 | -1,06 | -8,24 |
| SL2165 | <i>mglC</i> | Galactoside transport system permease protein mglC | 1,03 | -1,75 | 6,61 |
| SL2166 | <i>mglA</i> | Galactose/methyl galactoside import ATP-binding protein MglA | -1,07 | -1,75 | 11,23 |
| SL2167 | <i>mglB</i> | D-galactose-binding periplasmic protein | 1,09 | -1,19 | 10,18 |
| SL2169 | <i>yeiB</i> | Uncharacterized protein yeiB | -1,10 | -1,00 | -4,93 |
| SL2170 | <i>folE</i> | GTP cyclohydrolase 1 | 1,10 | 1,04 | -3,82 |
| SL2175 | <i>uhpC</i> | Regulatory protein uhpC | 1,13 | -1,03 | 2,60 |
| SL2179 | <i>yeiH</i> | UPF0324 inner membrane protein yeiH | 1,13 | 1,21 | -2,57 |
| SL2181 | <i>fruA</i> | PTS system fructose-specific EIIBC component | 1,17 | 1,23 | -10,61 |
| SL2182 | <i>fruK</i> | 1-phosphofructokinase | 1,06 | 1,18 | -8,46 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL2183 | <i>fruB</i> | Multiphosphoryl transfer protein | -1,06 | -1,02 | -6,16 |
| SL2184 | <i>setB</i> | Sugar efflux transporter B | -1,25 | -1,03 | -5,41 |
| SL2190 | <i>yeiU</i> | Inner membrane protein yeiU | -1,14 | 1,09 | -2,33 |
| SL2191 | <i>spr</i> | Lipoprotein spr | -1,35 | 1,17 | -3,81 |
| SL2204 | <i>yejL</i> | UPF0352 protein yejL | -1,17 | -1,16 | -2,47 |
| SL2205 | <i>yejM</i> | Inner membrane protein yejM | 1,01 | -1,05 | -2,01 |
| SL2212 | - | Prohead Protease | 1,04 | 1,13 | -2,07 |
| SL2212 | - | Prohead Protease | 1,04 | 1,13 | -2,07 |
| SL2213 | - | Hypothetical | 1,16 | -1,13 | -2,23 |
| SL2214 | <i>pifA</i> | KAP P-Loop Domain-Containing Protein | -1,29 | -1,52 | 2,07 |
| SL2220 | - | Homolog Of Virulence Protein MsgA | -1,66 | 1,18 | -2,64 |
| SL2221 | - | Conserved Hypothetical Protein | -2,49 | 1,39 | -2,04 |
| SL2225 | <i>napC</i> | Cytochrome c-type protein napC | 1,06 | -1,02 | 2,49 |
| SL2227 | <i>napH</i> | Ferredoxin-type protein napH | 1,02 | -1,02 | 2,21 |
| SL2228 | <i>napG</i> | Ferredoxin-type protein napG | 1,15 | -1,12 | 2,65 |
| SL2229 | <i>napA</i> | Periplasmic nitrate reductase | 1,17 | -1,04 | 3,48 |
| SL2243 | <i>ttuB</i> | Putative tartrate transporter | 1,05 | -1,13 | 3,31 |
| SL2256 | <i>sseL</i> | Deubiquitinase sseL | -7,62 | 1,57 | -9,57 |
| SL2258 | <i>yfaU</i> | 2-keto-3-deoxy-L-rhamnonate aldolase | 1,38 | 1,15 | 1,99 |
| SL2261 | <i>yfaX</i> | Uncharacterized HTH-type transcriptional regulator yfaX | 1,42 | 1,43 | 2,53 |
| SL2265 | <i>ais</i> | Lipopolysaccharide core heptose(II)-phosphate phosphatase | -1,34 | 1,08 | -4,74 |
| SL2266 | <i>arnB</i> | UDP-4-amino-4-deoxy-L-arabinose--oxoglutarate aminotransferase | -1,29 | 1,15 | -2,44 |
| SL2267 | <i>arnC</i> | Undecaprenyl-phosphate 4-deoxy-4-formamido-L-arabinose transferase | -1,49 | -1,03 | -2,05 |
| SL2269 | <i>arnD</i> | Probable 4-deoxy-4-formamido-L-arabinose-phosphoundecaprenol deformylase ArnD | -1,35 | -1,10 | -2,06 |
| SL2270 | <i>arnT</i> | Undecaprenyl phosphate-alpha-4-amino-4-deoxy-L-arabinose arabinosyl transferase | -1,32 | -1,01 | -2,12 |
| SL2272 | <i>arnF</i> | Probable 4-amino-4-deoxy-L-arabinose-phosphoundecaprenol flippase subunit ArnF | -1,17 | 1,24 | -2,31 |
| SL2277 | <i>menH</i> | 2-succinyl-6-hydroxy-2,4-cyclohexadiene-1-carboxylate synthase | 1,44 | 1,02 | -2,59 |
| SL2279 | <i>menF</i> | Menaquinone-specific isochorismate synthase | -1,00 | -1,05 | -2,16 |
| SL2283 | <i>cheV</i> | Chemotaxis protein cheV | -1,26 | -1,24 | -10,75 |
| SL2284 | <i>yfbK</i> | Uncharacterized protein yfbK | 1,05 | -1,11 | -2,45 |
| SL2287 | <i>nuoL</i> | NADH-quinone oxidoreductase subunit L | 1,04 | -1,10 | 1,99 |
| SL2288 | <i>nuoK</i> | NADH-quinone oxidoreductase subunit K | 1,03 | -1,13 | 2,30 |
| SL2290 | <i>nuoI</i> | NADH-quinone oxidoreductase subunit I | 1,02 | -1,10 | 1,99 |
| SL2299 | <i>IrhA</i> | Probable HTH-type transcriptional regulator IrhA | -1,35 | 1,08 | -2,65 |
| SL2305 | <i>yfbV</i> | UPF0208 membrane protein yfbV | -1,17 | -1,00 | -2,12 |
| SL2306 | <i>ackA</i> | Acetate kinase | -1,09 | -1,09 | -3,07 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-------------------|-------------------|-----------------------|
| SL2308 | <i>yfcC</i> | Uncharacterized protein <i>yfcC</i> | 1,14 | -1,21 | -2,45 |
| SL2311 | <i>ulaA</i> | Ascorbate-specific permease IIC component <i>ulaA</i> | 1,08 | -1,02 | 2,27 |
| SL2312 | <i>ulaB</i> | putative sugar phosphotransferase component IIB | -1,02 | -1,08 | 2,94 |
| SL2313 | <i>ulaC</i> | Ascorbate-specific phosphotransferase enzyme IIA component | -1,14 | -1,17 | 3,39 |
| SL2323 | <i>hisJ</i> | Histidine-binding periplasmic protein | -1,05 | -1,15 | 2,32 |
| SL2324 | <i>argT</i> | Lysine-arginine-ornithine-binding periplasmic protein | -1,15 | 1,01 | 7,89 |
| SL2327 | - | Amino Acid Racemase | 1,18 | 1,13 | 2,86 |
| SL2330 | <i>rocR</i> | Arginine utilization regulatory protein <i>rocR</i> | 1,21 | 1,43 | 1,99 |
| SL2339 | <i>pdxB</i> | Erythonate-4-phosphate dehydrogenase | -1,02 | -1,07 | -2,04 |
| SL2357 | <i>fadJ</i> | Fatty acid oxidation complex subunit alpha | -1,03 | 1,15 | 4,65 |
| SL2360 | <i>fadL</i> | Long-chain fatty acid transport protein | -1,14 | 1,08 | 7,09 |
| SL2363 | <i>pgtE</i> | Outer membrane protease E | -2,81 | 1,47 | -2,42 |
| SL2367 | <i>pgtP</i> | Phosphoglycerate transporter protein | 1,36 | 1,62 | 2,39 |
| SL2369 | <i>ddg</i> | Protein <i>ddg</i> | -1,46 | -1,05 | -11,56 |
| SL2378 | <i>yfeA</i> | Uncharacterized protein <i>yfeA</i> | -1,11 | -1,04 | -2,35 |
| SL2393 | <i>cysK</i> | Cysteine synthase A | 1,11 | 1,01 | 2,16 |
| SL2404 | <i>cysA</i> | Sulfate/thiosulfate import ATP-binding protein <i>cysA</i> | 1,55 | 1,39 | 12,67 |
| SL2405 | <i>cysW</i> | Sulfate transport system permease protein <i>cysW</i> | 1,09 | -1,12 | 6,01 |
| SL2406 | <i>cysU</i> | Sulfate transport system permease protein <i>cysT</i> | 1,34 | 1,03 | 8,74 |
| SL2407 | <i>cysP</i> | Thiosulfate-binding protein | -1,07 | -1,31 | 13,02 |
| SL2408 | <i>ucpA</i> | Oxidoreductase <i>ucpA</i> | 1,35 | 1,16 | 3,08 |
| SL2432 | <i>eutP</i> | Ethanolamine utilization protein <i>eutP</i> | -1,30 | 1,35 | 2,01 |
| SL2435 | <i>maeB</i> | NADP-dependent malic enzyme | 1,15 | -1,08 | 5,97 |
| SL2437 | <i>tktB</i> | Transketolase 2 | 1,18 | 1,11 | 2,01 |
| SL2438 | - | Hypothetical | -1,08 | -1,04 | -2,50 |
| SL2439 | <i>ypfG</i> | Uncharacterized protein <i>ypfG</i> | 1,12 | 1,41 | -2,79 |
| SL2459 | <i>hda</i> | DnaA-homolog protein <i>hda</i> | -1,01 | 1,00 | -2,04 |
| SL2462 | <i>purM</i> | Phosphoribosylformylglycinamide cyclo-ligase | -1,04 | 1,28 | -2,28 |
| SL2463 | <i>purN</i> | Phosphoribosylglycinamide formyltransferase | 1,14 | 1,09 | -2,33 |
| SL2467 | - | Hypothetical | -1,23 | -1,01 | -3,33 |
| SL2468 | <i>yfgG</i> | Uncharacterized protein <i>yfgG</i> | 1,01 | 1,01 | -3,19 |
| SL2469 | - | Hypothetical | 1,52 | 1,35 | -2,17 |
| SL2471 | <i>guaA</i> | GMP synthase [glutamine-hydrolyzing] | 1,01 | 1,02 | -2,32 |
| SL2472 | <i>guaB</i> | Inosine-5'-monophosphate dehydrogenase | -1,09 | 1,02 | -3,20 |
| SL2473 | <i>xseA</i> | Exodeoxyribonuclease 7 large subunit | -1,13 | -1,03 | -2,01 |
| SL2478 | <i>sinl</i> | Outer Membrane Protein | 1,21 | 1,13 | 2,39 |
| SL2484 | <i>hisS</i> | Histidyl-tRNA synthetase | -1,02 | -1,10 | -2,15 |
| SL2488 | <i>ndk</i> | Nucleoside diphosphate kinase | 1,18 | 1,01 | 6,14 |
| SL2495 | <i>sseA</i> | 3-mercaptopyruvate sulfurtransferase | 1,08 | 1,25 | 2,90 |
| SL2502 | <i>hscB</i> | Co-chaperone protein <i>hscB</i> | 1,01 | 1,05 | -2,38 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL2505 | <i>iscS</i> | Cysteine desulfurase | -1,17 | 1,13 | -1,99 |
| SL2506 | <i>iscR</i> | HTH-type transcriptional regulator <i>iscR</i> | -1,38 | 1,03 | -3,23 |
| SL2507 | <i>trmJ</i> | tRNA (cytidine/uridine-2'-O-) methyltransferase <i>trmJ</i> | 1,39 | 1,02 | -2,12 |
| SL2510 | <i>asrA</i> | Anaerobic sulfite reductase subunit A | 1,36 | 1,67 | -3,47 |
| SL2511 | <i>asrB</i> | Anaerobic sulfite reductase subunit B | 1,26 | 1,34 | -3,42 |
| SL2512 | <i>asrC</i> | Anaerobic sulfite reductase subunit C | 1,33 | 1,46 | -2,90 |
| SL2515 | <i>csiE</i> | Stationary phase-inducible protein <i>csiE</i> | 1,24 | 1,36 | 6,85 |
| SL2518 | <i>hmpA</i> | Flavohemoprotein | -1,07 | 1,11 | 5,21 |
| SL2519 | <i>cadC</i> | Transcriptional activator <i>cadC</i> | 1,07 | -1,02 | -2,31 |
| SL2521 | <i>cadA</i> | Lysine decarboxylase, inducible | 1,46 | -1,13 | -4,98 |
| SL2522 | <i>yjdL</i> | Probable dipeptide and tripeptide permease <i>YjdL</i> | 1,00 | 1,05 | -6,76 |
| SL2527 | <i>purL</i> | Phosphoribosylformylglycinamide synthase | 1,27 | 1,43 | 2,08 |
| SL2532 | <i>ybbF</i> | Putative PTS system EIIBC component <i>ybbF</i> | 1,22 | 1,04 | 3,24 |
| SL2533 | <i>murQ</i> | N-acetylmuramic acid 6-phosphate etherase | 1,17 | 1,02 | 3,66 |
| SL2537 | <i>cynR</i> | HTH-type transcriptional regulator <i>cynR</i> | -1,02 | 1,05 | 3,05 |
| SL2538 | <i>yfhL</i> | Uncharacterized ferredoxin-like protein <i>yfhL</i> | -1,32 | 1,11 | -2,31 |
| SL2542 | <i>era</i> | GTP-binding protein <i>era</i> homolog | -1,00 | -1,09 | -2,18 |
| SL2543 | <i>rnc</i> | Ribonuclease 3 | -1,05 | 1,00 | -2,47 |
| SL2546 | <i>gogB</i> | Hypothetical | -1,55 | -1,09 | -2,58 |
| SL2548 | - | Hypothetical Protein SL2548 | -1,50 | -1,10 | -3,48 |
| SL2549 | - | PagK-Like Protein | -2,08 | 1,46 | -4,10 |
| SL2550 | <i>ycdD</i> | Tail fiber assembly protein homolog from lambdoid prophage Fels-1 | -2,76 | -1,35 | -4,98 |
| SL2551 | - | Appr-1-P Processing Domain-Containing Protein | -2,46 | -1,34 | -4,76 |
| SL2552 | <i>stfQ</i> | Side tail fiber protein homolog from lambdoid prophage Qin | -1,74 | -1,12 | -3,35 |
| SL2553 | - | Hocifivity Protein J | -2,46 | -1,12 | -11,08 |
| SL2554 | - | Phage Tail Assembly Protein | -1,31 | -1,13 | -2,08 |
| SL2555 | - | NLP/P60 Protein | -1,80 | -1,35 | -3,95 |
| SL2556 | - | Phage Minor Tail Protein L | -1,54 | -1,16 | -2,63 |
| SL2557 | - | Minor Tail Protein | -1,77 | -1,25 | -2,28 |
| SL2558 | - | Hypothetical | -1,46 | -1,20 | -2,18 |
| SL2559 | - | Minor Tail Protein | -1,81 | -1,02 | -4,83 |
| SL2560 | - | Minor Tail Component Of Putative Prophage | -2,14 | -1,10 | -5,25 |
| SL2561 | - | Tail Protein V | -1,60 | 1,04 | -2,80 |
| SL2562 | - | Minor Tail Protein U | -1,71 | -1,09 | -2,81 |
| SL2563 | <i>gipA</i> | Putative transposase in snaA-snaB intergenic region | -1,48 | 1,01 | -2,39 |
| SL2564 | - | Phage Tail Component | -1,67 | -1,02 | -3,00 |
| SL2565 | - | Tail Attachment Protein | -2,08 | -1,12 | -2,67 |
| SL2566 | - | DNA Packaging-Like Protein | -1,95 | -1,02 | -3,76 |
| SL2567 | - | P21 prophage-derived major head protein | -1,99 | -1,10 | -4,91 |
| SL2568 | - | Head Decoration Protein | -1,94 | -1,06 | -4,48 |
| SL2569 | <i>sppA</i> | Putative signal peptide peptidase <i>sppA</i> | -2,37 | -1,11 | -10,71 |
| SL2570 | - | Lambda Family Phage Portal Protein | -2,15 | -1,13 | -6,06 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-------------------|-------------------|-----------------------|
| SL2571 | - | Lambda prophage-derived head-to-tail joining protein W | -2,13 | -1,13 | -2,93 |
| SL2572 | <i>tfaD</i> | Putative tail fiber assembly protein homolog from lambdoid prophage DLP12 | -2,40 | -1,07 | -4,71 |
| SL2573 | <i>nohA</i> | P21 prophage-derived terminase small subunit | -2,45 | -1,05 | -8,60 |
| SL2575 | <i>rzpD</i> | Putative Rz endopeptidase from lambdoid prophage DLP12 | -2,15 | -1,02 | -5,68 |
| SL2576 | <i>arrD</i> | Probable lysozyme from lambdoid prophage DLP12 | -1,78 | -1,03 | -3,56 |
| SL2577 | - | Hypothetical | -1,85 | -1,13 | -2,26 |
| SL2578 | - | Hypothetical | 1,66 | 1,60 | 2,10 |
| SL2583 | - | Hypothetical | 1,01 | 1,10 | 2,16 |
| SL2592 | - | Gifsy-1 Prophage CI Protein | -1,28 | 1,28 | -2,12 |
| SL2596 | - | Hypothetical | -1,72 | -1,01 | -2,41 |
| SL2597 | <i>recE</i> | Exodeoxyribonuclease 8 | -1,33 | 1,01 | -2,59 |
| SL2602 | <i>rseB</i> | Sigma-E factor regulatory protein rseB | -1,23 | -1,41 | -2,07 |
| SL2604 | <i>rpoE</i> | RNA polymerase sigma-E factor | -1,10 | -1,09 | -2,10 |
| SL2609 | <i>eamB</i> | Cysteine/O-acetylserine efflux protein | 1,53 | 1,05 | -7,15 |
| SL2610 | <i>grcA</i> | Autonomous glycyl radical cofactor | 1,06 | 1,11 | -2,16 |
| SL2613 | <i>trxC</i> | Thioredoxin-2 | -1,10 | 1,03 | -2,37 |
| SL2618 | <i>kgtP</i> | Alpha-ketoglutarate permease | 1,23 | 1,05 | 2,63 |
| SL2620 | <i>clpB</i> | Chaperone protein clpB | 1,03 | 1,15 | 2,60 |
| SL2622 | <i>rluD</i> | Ribosomal large subunit pseudouridine synthase D | -1,02 | -1,09 | -2,26 |
| SL2623 | <i>yfiO</i> | UPF0169 lipoprotein yfiO | -1,30 | -1,33 | -2,41 |
| SL2624 | <i>raiA</i> | Ribosome-associated inhibitor A | 1,15 | 1,42 | 2,90 |
| SL2625 | <i>pheA</i> | P-protein | 1,11 | -1,21 | 2,88 |
| SL2630 | <i>yfiN</i> | Probable diguanylate cyclase YfiN | -1,01 | 1,18 | -2,63 |
| SL2640 | - | Hypothetical Protein SL2640 | 1,13 | 1,04 | 2,32 |
| SL2651 | <i>corE</i> | putative cytochrome c-type biogenesis protein | -1,17 | 1,04 | -2,45 |
| SL2652 | <i>corB</i> | putative membrane protein | -1,25 | -1,36 | -2,50 |
| SL2673 | <i>pinE</i> | DNA-invertase from lambdoid prophage e14 | -1,32 | 1,11 | -3,80 |
| SL2674 | <i>sopE</i> | Guanine nucleotide exchange factor sopE | -1,33 | -1,03 | -27,69 |
| SL2676 | - | Hypothetical | 1,16 | 1,09 | 1,99 |
| SL2695 | <i>smf</i> | Protein smf | -1,04 | -1,23 | 2,11 |
| SL2696 | - | Hypothetical | -1,12 | -1,39 | 3,87 |
| SL2697 | - | Hypothetical | -1,30 | -1,61 | -2,19 |
| SL2703 | <i>ybil</i> | Hypothetical (similar a P2p38) | -2,29 | -1,54 | -1,69 |
| SL2704 | - | Putative uncharacterized protein ORFC-like in prophage region | -3,07 | -1,35 | -3,46 |
| SL2709 | <i>xerD</i> | Tyrosine recombinase xerD | -1,14 | -1,37 | 2,01 |
| SL2710 | <i>yopC</i> | SPBc2 prophage-derived uncharacterized protein yopC | -1,34 | -1,52 | 3,11 |
| SL2712 | <i>intA</i> | Prophage CP4-57 integrase | -1,10 | -1,19 | 2,48 |
| SL2713 | - | Hypothetical | -1,41 | -2,00 | 1,55 |
| SL2715 | - | Hypothetical Protein SL2715 | 1,01 | -1,13 | 2,19 |
| SL2719 | - | Hypothetical | 1,01 | -1,31 | 3,69 |
| SL2720 | - | Hypothetical | 1,12 | -1,38 | 3,04 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|---------------|--|-------------------|-------------------|-----------------------|
| SL2721 | - | P4 prophage-derived uncharacterized protein t2655 | 1,33 | -1,17 | 2,87 |
| SL2722 | <i>traC</i> | DNA primase traC | 1,07 | -1,27 | 4,29 |
| SL2723 | <i>intA</i> | Prophage CP4-57 integrase | 1,26 | 1,78 | 6,56 |
| SL2724 | <i>intA</i> | Integrase | 1,18 | 1,34 | 3,40 |
| SL2726 | - | Hypothetical | -1,35 | -1,30 | -2,11 |
| SL2740 | <i>hxkB</i> | 3-hexulose-6-phosphate isomerase | 1,22 | -1,18 | 2,93 |
| SL2741 | - | Glucose-6-Phosphate Isomerase | 1,26 | 1,00 | 2,42 |
| SL2743 | <i>sgrR</i> | HTH-type transcriptional regulator sgrR | 1,10 | 1,41 | 3,19 |
| SL2747 | <i>intA</i> | Prophage CP4-57 integrase | -1,07 | 1,00 | 2,76 |
| SL2755 | <i>fliA</i> | Repressor of phase 1 flagellin gene | -12,65 | -4,66 | -15,85 |
| SL2756 | <i>fliB</i> | Phase 2 flagellin | -2,40 | -1,63 | -1,84 |
| SL2756 | <i>fliB</i> | Phase 2 flagellin | -2,40 | -1,63 | -1,84 |
| SL2758 | <i>iroB</i> | putative glycosyltransferase | -1,39 | 1,54 | -5,31 |
| SL2759 | <i>iroC</i> | Putative multidrug export ATP-binding/permease protein | 1,36 | 1,74 | -2,78 |
| SL2760 | <i>iroD</i> | Enterochelin esterase | 1,04 | -1,11 | -2,90 |
| SL2764 | <i>ybjX</i> | Uncharacterized protein ybjX | -1,45 | 1,10 | -4,33 |
| SL2765 | <i>mig-14</i> | putative transcriptional regulator | -1,67 | -1,35 | -3,63 |
| SL2766 | - | Hypothetical | -1,47 | 1,04 | -2,82 |
| SL2768 | <i>tctE</i> | Sensor protein tctE | -1,13 | -1,40 | 7,27 |
| SL2769 | <i>tctD</i> | Transcriptional regulatory protein tctD | 1,03 | 1,08 | 13,84 |
| SL2770 | <i>yfIP</i> | UPF0065 protein yfIP | -1,24 | -1,43 | 3,01 |
| SL2771 | - | Hypothetical | -1,06 | -1,07 | 4,00 |
| SL2773 | <i>csiD</i> | Protein csiD | -1,27 | -1,17 | 11,87 |
| SL2774 | <i>ygaF</i> | Uncharacterized protein ygaF | -1,30 | -1,54 | 9,95 |
| SL2775 | <i>gabD</i> | Succinate-semialdehyde dehydrogenase [NADP+] | -1,31 | -1,53 | 12,61 |
| SL2776 | <i>gabT</i> | 4-aminobutyrate aminotransferase | -1,37 | -1,66 | 7,78 |
| SL2777 | <i>gabP</i> | GABA permease | -1,46 | -1,56 | 6,21 |
| SL2783 | <i>stpA</i> | DNA-binding protein stpA | -1,14 | -1,00 | -10,03 |
| SL2784 | <i>ygaW</i> | Uncharacterized protein ygaW | 1,29 | 1,21 | -3,82 |
| SL2785 | <i>ygaC</i> | Uncharacterized protein ygaC | -1,02 | 1,22 | -2,25 |
| SL2787 | <i>mocR</i> | Probable rhizopine catabolism regulatory protein mocR | 1,16 | 1,01 | 2,22 |
| SL2814 | <i>srlB</i> | Glucitol/sorbitol-specific phosphotransferase enzyme IIA component | 1,10 | -1,54 | -2,28 |
| SL2815 | <i>srlD</i> | Sorbitol-6-phosphate 2-dehydrogenase | 1,14 | -1,24 | -2,47 |
| SL2816 | <i>gutM</i> | Glucitol operon activator protein | -1,01 | -1,27 | -2,46 |
| SL2823 | <i>hydN</i> | Electron transport protein hydN | 1,30 | 1,10 | -7,66 |
| SL2825 | <i>hydI</i> | Hydrogenase 3 maturation protease | 1,09 | 1,09 | 2,56 |
| SL2826 | <i>hydH</i> | Formate hydrogenlyase maturation protein hydH | 1,04 | 1,06 | 2,01 |
| SL2831 | <i>hydC</i> | Formate hydrogenlyase subunit 3 | 1,05 | -1,28 | -3,72 |
| SL2832 | <i>hydB</i> | Formate hydrogenlyase subunit 2 | -1,10 | 1,04 | -4,92 |
| SL2833 | <i>hydA</i> | Formate hydrogenlyase regulatory protein hydA | 1,02 | -1,01 | -7,96 |
| SL2838 | <i>hypE</i> | Hydrogenase isoenzymes formation protein hypE | 1,17 | -1,26 | -2,56 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-------------------|-------------------|-----------------------|
| SL2839 | <i>fhlA</i> | Formate hydrogenlyase transcriptional activator | 1,22 | -1,02 | -2,24 |
| SL2844 | <i>sitD</i> | Probable iron transport system membrane protein HI_0359 | -1,18 | -1,12 | -3,87 |
| SL2845 | <i>yopJ</i> | Effector protein yopJ | -1,36 | -1,29 | -5,48 |
| SL2846 | <i>sprB</i> | AraC family transcriptional regulator | -1,39 | -1,66 | -14,85 |
| SL2847 | <i>sirC</i> | Transcriptional regulator sirC | -1,41 | -1,61 | -10,80 |
| SL2848 | - | Hypothetical | -1,56 | -1,22 | -20,93 |
| SL2849 | <i>orgB</i> | Oxygen-regulated invasion protein orgB | -1,44 | -1,20 | -9,10 |
| SL2850 | <i>orgA</i> | Oxygen-regulated invasion protein orgA | -1,49 | -1,26 | -21,71 |
| SL2851 | <i>prgK</i> | Lipoprotein prgK | -1,30 | -1,14 | -8,73 |
| SL2852 | <i>prgJ</i> | Protein prgJ | -1,22 | -1,08 | -8,23 |
| SL2853 | <i>prgl</i> | Protein prgl | -1,13 | -1,02 | -4,71 |
| SL2854 | <i>prgH</i> | Protein prgH | -1,36 | 1,09 | -18,46 |
| SL2855 | <i>hilD</i> | Transcriptional regulator hilD | -1,39 | -1,07 | -5,63 |
| SL2856 | <i>hilA</i> | Transcriptional regulator hilA | -1,26 | -1,38 | -10,34 |
| SL2857 | <i>iagB</i> | Invasion protein iagB | -1,27 | -1,07 | -7,09 |
| SL2858 | <i>sptP</i> | Secreted effector protein sptP | -1,24 | -1,03 | -5,53 |
| SL2859 | <i>sicP</i> | Chaperone protein sicP | -1,35 | -1,14 | -8,37 |
| SL2860 | <i>iacP</i> | Probable acyl carrier protein iacP | -1,30 | -1,10 | -21,34 |
| SL2861 | <i>sipA</i> | Cell invasion protein sipA | -1,25 | -1,06 | -15,35 |
| SL2862 | <i>sipD</i> | Cell invasion protein sipD | -1,13 | 1,02 | -18,49 |
| SL2863 | <i>sipC</i> | Cell invasion protein sipC | -1,10 | 1,01 | -6,21 |
| SL2864 | <i>sipB</i> | Cell invasion protein sipB | -1,11 | 1,03 | -7,20 |
| SL2865 | <i>sicA</i> | Chaperone protein sicA | -1,10 | 1,09 | -8,04 |
| SL2866 | <i>spaS</i> | Surface presentation of antigens protein spaS | -1,42 | -1,39 | -21,68 |
| SL2867 | <i>spaR</i> | Surface presentation of antigens protein spaR | -1,55 | -1,58 | -22,12 |
| SL2868 | <i>spaQ</i> | Surface presentation of antigens protein SpaQ | -1,54 | -1,38 | -32,11 |
| SL2869 | <i>spaP</i> | Surface presentation of antigens protein spaP | -1,68 | -1,43 | -29,30 |
| SL2870 | <i>spaO</i> | Surface presentation of antigens protein SpaO | -1,28 | -1,25 | -14,14 |
| SL2871 | <i>spaN</i> | Surface presentation of antigens protein spaN | -1,17 | -1,10 | -9,31 |
| SL2872 | <i>spaM</i> | Surface presentation of antigens protein spaM | -1,29 | -1,40 | -10,63 |
| SL2873 | <i>spaL</i> | Probable ATP synthase spaL | -1,29 | -1,41 | -10,53 |
| SL2874 | <i>spaK</i> | Surface presentation of antigens protein spaK | -1,15 | -1,03 | -6,61 |
| SL2875 | <i>invA</i> | Invasion protein invA | -1,27 | -1,01 | -12,89 |
| SL2876 | <i>invE</i> | Invasion protein invE | -1,30 | -1,14 | -20,75 |
| SL2877 | <i>invG</i> | Protein invG | -1,17 | -1,02 | -8,31 |
| SL2878 | <i>invF</i> | Invasion protein invF | -1,17 | 1,06 | -8,31 |
| SL2879 | <i>invH</i> | Invasion lipoprotein invH | -1,50 | -1,13 | -10,98 |
| SL2880 | - | Hypothetical | -1,50 | 1,10 | -2,45 |
| SL2881 | - | Hypothetical | -1,52 | -1,00 | -3,47 |
| SL2884 | - | Hypothetical | 1,38 | 1,30 | 6,08 |
| SL2885 | - | GCN5-Related N-Acetyltransferase | 1,09 | 1,04 | 5,08 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL2892 | <i>ygbN</i> | Uncharacterized permease HI_1015 | 1,20 | -1,09 | 3,82 |
| SL2893 | <i>rffG</i> | Uncharacterized protein HI_1014 | 1,10 | 1,17 | 4,43 |
| SL2894 | <i>ygbM</i> | Protein ygbM | -1,09 | -1,22 | 4,27 |
| SL2895 | <i>ygbL</i> | Putative aldolase class 2 protein ygbL | 1,05 | 1,07 | 5,99 |
| SL2896 | <i>ygbK</i> | Uncharacterized protein ygbK | -1,09 | 1,24 | 7,13 |
| SL2897 | <i>ygbJ</i> | Uncharacterized oxidoreductase ygbJ | -1,09 | 1,34 | 6,18 |
| SL2899 | <i>slyA</i> | Transcriptional regulator | -1,10 | 1,09 | 2,00 |
| SL2903 | <i>rpoS</i> | RNA polymerase sigma factor rpoS | 1,17 | 1,12 | 2,05 |
| SL2911 | <i>ygbE</i> | Inner membrane protein ygbE | -1,18 | 1,12 | 2,47 |
| SL2912 | <i>cysC</i> | Adenylyl-sulfate kinase | -1,09 | -1,01 | 9,51 |
| SL2913 | <i>cysN</i> | Sulfate adenylyltransferase subunit 1 | 1,04 | 1,00 | 11,16 |
| SL2914 | <i>cysD</i> | Sulfate adenylyltransferase subunit 2 | 1,00 | -1,20 | 4,76 |
| SL2915 | <i>iap</i> | Alkaline phosphatase isozyme conversion protein | -1,08 | -1,03 | -3,91 |
| SL2924 | <i>sopD</i> | Secreted effector protein sopD | -1,52 | 1,19 | -23,34 |
| SL2925 | <i>cysH</i> | Phosphoadenosine phosphosulfate reductase | 1,07 | -1,06 | 5,34 |
| SL2926 | <i>cysI</i> | Sulfite reductase [NADPH] hemoprotein beta-component | 1,12 | -1,02 | 6,16 |
| SL2927 | <i>cysJ</i> | Sulfite reductase [NADPH] flavoprotein alpha-component | -1,07 | -1,06 | 4,34 |
| SL2928 | <i>queD</i> | 6-carboxy-5,6,7,8-tetrahydropterin synthase | -1,10 | 1,06 | -2,01 |
| SL2929 | - | Uncharacterized protein MJ0301 | 1,10 | 1,29 | 2,23 |
| SL2942 | <i>gudX</i> | Glucarate dehydratase-related protein | 1,19 | 1,10 | 3,30 |
| SL2943 | <i>gudP</i> | Probable glucarate transporter | 1,30 | 1,14 | 5,33 |
| SL2946 | <i>yqcC</i> | Uncharacterized protein yqcC | 1,31 | -1,09 | -2,86 |
| SL2949 | <i>ygdH</i> | LOG family protein ygdH | 1,08 | -1,08 | 2,16 |
| SL2949 | <i>ygdH</i> | LOG family protein ygdH | 1,08 | -1,08 | 2,16 |
| SL2950 | <i>sdaC</i> | Serine transporter | -1,20 | -1,09 | 2,59 |
| SL2951 | <i>sdaB</i> | L-serine dehydratase 2 | 1,12 | -1,07 | 3,60 |
| SL2953 | <i>fucO</i> | Lactaldehyde reductase | 1,09 | -1,04 | 3,10 |
| SL2954 | <i>fucA</i> | L-fuculose phosphate aldolase | -1,08 | 1,00 | 2,94 |
| SL2959 | <i>fucR</i> | L-fucose operon activator | -1,02 | 1,03 | 2,02 |
| SL2961 | <i>ygdD</i> | UPF0382 inner membrane protein ygdD | -1,18 | -1,02 | -2,47 |
| SL2962 | <i>gcvA</i> | Glycine cleavage system transcriptional activator | -1,22 | 1,12 | -2,75 |
| SL2969 | <i>amiC</i> | N-acetyl muramoyl-L-alanine amidase AmiC | -1,05 | 1,02 | -1,99 |
| SL2977 | <i>ppdB</i> | Prephilin peptidase-dependent protein B | -1,28 | -1,11 | 2,36 |
| SL2979 | <i>thyA</i> | Thymidylate synthase | 1,04 | -1,03 | -2,07 |
| SL2984 | <i>ygdQ</i> | UPF0053 inner membrane protein ygdQ | -1,22 | 1,03 | -4,13 |
| SL2994 | <i>araE</i> | Arabinose-proton symporter | 1,49 | 1,34 | 4,71 |
| SL2996 | <i>kdul</i> | 4-deoxy-L-threo-5-hexosulose-uronate ketol-isomerase | -1,33 | -1,48 | 3,46 |
| SL2997 | <i>yqeF</i> | Probable acetyl-CoA acetyltransferase | -1,08 | -1,04 | 4,20 |
| SL2999 | - | Hypothetical | 1,97 | 1,21 | -2,88 |
| SL3000 | <i>yqeG</i> | Inner membrane transport protein yqeG | 1,04 | -1,02 | -3,13 |
| SL3008 | <i>stdA</i> | Uncharacterized fimbrial-like protein ybgD | 1,50 | 1,10 | 2,60 |
| SL3010 | - | Virulence membrane protein | -1,03 | 1,16 | 2,46 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL3017 | <i>prfB</i> | Peptide chain release factor 2 | -1,09 | -1,04 | -2,12 |
| SL3026 | <i>yqfB</i> | UPF0267 protein yqfB | 1,20 | 1,27 | 2,53 |
| SL3041 | <i>yggE</i> | Uncharacterized protein yggE | -1,05 | 1,12 | -2,34 |
| SL3048 | - | Hypothetical | 1,34 | -1,23 | 3,16 |
| SL3049 | - | Permease Protein Of ABC-Type Cobalt Transporter | 1,38 | -1,21 | 2,71 |
| SL3050 | <i>cbiO1</i> | Cobalt import ATP-binding protein CbiO 1 | 1,19 | -1,37 | 2,22 |
| SL3051 | <i>cbiO</i> | Cobalt import ATP-binding protein CbiO | 1,32 | -1,15 | 2,12 |
| SL3057 | <i>yjmC</i> | Uncharacterized oxidoreductase yjmC | 1,12 | -1,35 | 2,33 |
| SL3058 | <i>yjjN</i> | Uncharacterized zinc-type alcohol dehydrogenase-like protein yjjN | -1,14 | -1,30 | 2,01 |
| SL3059 | <i>uxuB</i> | D-mannonate oxidoreductase | -1,09 | -1,19 | 3,52 |
| SL3064 | <i>yqgD</i> | Uncharacterized protein yqgD | -1,10 | 1,08 | -4,69 |
| SL3065 | <i>metK</i> | S-adenosylmethionine synthase | -1,11 | -1,17 | -2,26 |
| SL3080 | <i>yggM</i> | Uncharacterized protein yggM | 1,70 | -1,04 | 2,39 |
| SL3081 | <i>ansB</i> | L-asparaginase 2 | 1,62 | 1,25 | 4,33 |
| SL3085 | <i>mutY</i> | A/G-specific adenine glycosylase | -1,13 | -1,16 | -2,32 |
| SL3088 | <i>nupG</i> | Nucleoside permease nupG | 1,14 | 1,19 | 2,45 |
| SL3095 | <i>budR</i> | HTH-type transcriptional regulator BudR | 1,05 | -1,27 | 2,43 |
| SL3098 | <i>moaR</i> | Monoamine regulon transcriptional regulator | 1,11 | 1,43 | 2,42 |
| SL3108 | <i>exuT</i> | Hexuronate transporter | 1,24 | 1,15 | 4,36 |
| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
| SL3109 | <i>uxuA</i> | Mannose dehydratase | 1,21 | -1,08 | 3,06 |
| SL3110 | <i>uxuB</i> | D-mannonate oxidoreductase | 1,20 | -1,03 | 2,95 |
| SL3111 | <i>uxaC</i> | Uronate isomerase | 1,15 | 1,04 | 2,61 |
| SL3112 | <i>bdlA</i> | Biofilm dispersion protein BdlA | -1,33 | -1,01 | -3,40 |
| SL3125 | <i>yghW</i> | Uncharacterized protein yghW | -1,36 | 1,16 | -6,35 |
| SL3126 | <i>tse</i> | Methyl-accepting chemotaxis serine transducer | -1,55 | 1,00 | -8,28 |
| SL3128 | - | Hypothetical | -1,27 | 1,12 | -2,72 |
| SL3129 | - | Hypothetical | -1,27 | 1,09 | -5,12 |
| SL3130 | - | Hypothetical | -1,43 | -1,26 | -7,27 |
| SL3132 | <i>exbD</i> | Biopolymer transport protein exbD | 1,20 | 1,13 | -2,14 |
| SL3133 | <i>exbB</i> | Biopolymer transport protein exbB | 1,04 | 1,15 | -2,24 |
| SL3138 | <i>yqhD</i> | Alcohol dehydrogenase yqhD | 1,07 | 1,14 | 2,16 |
| SL3142 | <i>ygiQ</i> | UPF0313 protein ygiQ | -1,38 | 1,18 | -2,01 |
| SL3143 | <i>yiiZ</i> | Uncharacterized protein yiiZ | -1,25 | -1,05 | 7,98 |
| SL3144 | - | C4-Dicarboxylate Transport System Permease Small Protein | -1,43 | -1,29 | 6,19 |
| SL3145 | <i>ygiK</i> | Uncharacterized protein ygiK | -1,14 | -1,20 | 3,14 |
| SL3150 | <i>ygiW</i> | Protein ygiW | 1,35 | 1,23 | 1,98 |
| SL3163 | <i>ygiD</i> | Uncharacterized protein ygiD | -2,08 | 1,12 | -9,28 |
| SL3165 | - | Arylsulfotransferase | -1,13 | -1,15 | 3,35 |
| SL3166 | <i>dsbA</i> | Thiol:disulfide interchange protein dsbA | -1,19 | -1,13 | 3,06 |
| SL3167 | <i>dsbB</i> | Putative protein-disulfide oxidoreductase | -1,31 | -1,22 | 3,38 |
| SL3170 | <i>glgS</i> | Glycogen synthesis protein glgS | 1,26 | 1,60 | 2,05 |
| SL3176 | <i>ygiM</i> | Uncharacterized protein ygiM | -1,23 | 1,09 | -3,56 |
| SL3178 | <i>bacA</i> | Undecaprenyl-diphosphatase | -1,19 | -1,11 | -2,21 |
| SL3179 | <i>folB</i> | Dihydronopterin aldolase | -1,39 | -1,02 | -2,66 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL3183 | <i>rpsU</i> | 30S ribosomal protein S21 | -1,10 | 1,23 | -3,63 |
| SL3184 | <i>dnaG</i> | DNA primase | -1,03 | 1,12 | -2,31 |
| SL3189 | <i>cheM</i> | methyl-accepting chemotaxis protein II | -1,38 | -1,15 | -3,94 |
| SL3192 | <i>fadH</i> | 2,4-dienoyl-CoA reductase [NADPH] | -1,06 | 1,12 | 6,90 |
| SL3196 | <i>ygjR</i> | Uncharacterized oxidoreductase <i>ygjR</i> | 1,34 | 1,05 | 2,00 |
| SL3197 | <i>alx</i> | Inner membrane protein <i>alx</i> | -1,24 | -1,08 | -2,21 |
| SL3198 | <i>sstT</i> | Serine/threonine transporter <i>sstT</i> | -1,05 | 1,04 | 2,88 |
| SL3199 | <i>yqjA</i> | Inner membrane protein <i>yqjA</i> | -1,37 | 1,17 | -2,94 |
| SL3200 | <i>yqjB</i> | Uncharacterized protein <i>yqjB</i> | -1,21 | 1,17 | -3,22 |
| SL3209 | <i>yhaL</i> | Hypothetical Protein <i>yhaL</i> | 1,20 | 1,49 | 5,32 |
| SL3211 | <i>yhaO</i> | Inner membrane transport protein <i>yhaO</i> | 1,06 | 1,03 | 2,15 |
| SL3214 | <i>tdcD</i> | Propionate kinase | 1,02 | 1,22 | -2,52 |
| SL3216 | <i>tdcB</i> | Threonine dehydratase catabolic | -1,26 | 1,33 | -2,06 |
| SL3217 | <i>tdcA</i> | HTH-type transcriptional regulator <i>tdcA</i> | 1,55 | 1,55 | 5,57 |
| SL3222 | <i>garL</i> | 5-keto-4-deoxy-D-glucarate aldolase | 1,27 | 1,19 | 2,25 |
| SL3223 | <i>garD</i> | D-galactarate dehydratase | 1,28 | 1,27 | 2,13 |
| SL3227 | <i>fruK</i> | 1-phosphofructokinase | -1,26 | -1,39 | -2,73 |
| SL3228 | <i>fruA</i> | PTS system fructose-specific EIIABC component | -1,11 | -1,19 | -2,11 |
| SL3229 | <i>fruB</i> | Multiphosphoryl transfer protein | -1,34 | -1,41 | -2,50 |
| SL3232 | <i>gatB</i> | Galactitol-specific phosphotransferase enzyme IIB component | -1,11 | -1,16 | 2,08 |
| SL3233 | <i>gatC</i> | Galactitol permease IIC component | 1,08 | 1,01 | 2,52 |
| SL3235 | <i>gatR</i> | Galactitol utilization operon repressor | 1,07 | -1,04 | 4,26 |
| SL3249 | <i>yhbW</i> | Uncharacterized protein <i>yhbW</i> | -1,37 | -1,38 | 2,08 |
| SL3252 | <i>mtr</i> | Tryptophan-specific transport protein | -1,22 | -1,07 | -2,62 |
| SL3253 | <i>deaD</i> | Cold-shock DEAD box protein A | -1,04 | -1,06 | -8,59 |
| SL3261 | <i>rimP</i> | Ribosome maturation factor <i>rimP</i> | -1,28 | -1,08 | -2,79 |
| SL3263 | - | Hypothetical | -1,04 | 1,35 | -2,48 |
| SL3264 | <i>secG</i> | Protein-export membrane protein <i>secG</i> | -1,16 | 1,05 | -2,46 |
| SL3270 | <i>yhbY</i> | RNA-binding protein <i>yhbY</i> | 2,18 | 1,01 | 1,19 |
| SL3271 | <i>greA</i> | Transcription elongation factor <i>greA</i> | -97,36 | 1,03 | 0,00 |
| SL3275 | <i>rpmA</i> | 50S ribosomal protein L27 | -1,33 | -1,01 | -3,03 |
| SL3276 | <i>rplU</i> | 50S ribosomal protein L21 | -1,20 | 1,03 | -2,51 |
| SL3284 | <i>mlaE</i> | Probable phospholipid ABC transporter permease protein <i>mlaE</i> | -1,15 | -1,10 | -1,98 |
| SL3293 | <i>yhbH</i> | Probable sigma(54) modulation protein | 1,24 | 1,43 | 2,78 |
| SL3294 | <i>ptsN</i> | Nitrogen regulatory protein | 1,19 | 1,06 | 2,57 |
| SL3301 | <i>yhcC</i> | Uncharacterized protein <i>yhcC</i> | 1,03 | 1,15 | -3,69 |
| SL3303 | <i>gltD</i> | Glutamate synthase [NADPH] small chain | 1,26 | 1,03 | 2,37 |
| SL3307 | <i>yhcH</i> | Uncharacterized protein <i>yhcH</i> | 1,60 | 1,04 | 2,30 |
| SL3308 | <i>nanK</i> | N-acetylmannosamine kinase | 1,30 | -1,18 | 2,02 |
| SL3313 | <i>sspB</i> | Stringent starvation protein B | -1,27 | -1,08 | -2,06 |
| SL3314 | <i>sspA</i> | Stringent starvation protein A | -1,25 | -1,02 | -2,69 |
| SL3318 | <i>yhcM</i> | Uncharacterized protein <i>yhcM</i> | -1,05 | -1,10 | -2,14 |
| SL3318 | <i>yhcM</i> | Uncharacterized protein <i>yhcM</i> | -1,05 | -1,10 | -2,14 |
| SL3322 | <i>citG1</i> | Probable 2-(5'-triphosphoribosyl)-3'-dephosphocoenzyme-A synthase 1 | 1,39 | 1,09 | 2,38 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SL3324 | <i>oadA</i> | Oxaloacetate decarboxylase alpha chain | 1,21 | -1,05 | 2,42 |
| SL3326 | <i>ttdB</i> | L(+)tartrate dehydratase subunit beta | 1,24 | -1,32 | 3,29 |
| SL3327 | <i>ttdA</i> | L(+)tartrate dehydratase subunit alpha | 1,12 | -1,23 | 4,25 |
| SL3328 | <i>yfbS</i> | Uncharacterized transporter MJ0672 | 1,00 | -1,49 | 3,26 |
| SL3330 | <i>pdhR</i> | GntR Family Transcriptional Regulator | -1,09 | -1,03 | -2,07 |
| SL3331 | <i>mdh</i> | Malate dehydrogenase | 1,18 | -1,00 | 4,77 |
| SL3335 | <i>yhcO</i> | Uncharacterized protein yhcO | 1,30 | 1,51 | 5,06 |
| SL3346 | <i>mreB</i> | Rod shape-determining protein mreB | -1,11 | 1,01 | -2,43 |
| SL3350 | <i>yedY</i> | Sulfoxide reductase catalytic subunit yedY | 1,06 | -1,03 | 2,85 |
| SL3354 | <i>yhdT</i> | Uncharacterized protein yhdT | 1,09 | 1,17 | -2,38 |
| SL3357 | <i>dusB</i> | tRNA-dihydrouridine synthase B | -1,42 | -1,03 | -3,85 |
| SL3358 | <i>fis</i> | DNA-binding protein fis | -1,24 | -1,03 | -3,28 |
| SL3363 | <i>acrE</i> | Acriflavine resistance protein E | 1,26 | 1,10 | -2,58 |
| SL3373 | <i>def</i> | Peptide deformylase | 1,02 | 1,07 | -2,19 |
| SL3374 | <i>fmt</i> | Methionyl-tRNA formyltransferase | -1,06 | -1,16 | -3,52 |
| SL3375 | <i>rsmB</i> | Ribosomal RNA small subunit methyltransferase B | -1,04 | -1,17 | -4,60 |
| SL3376 | <i>trkA</i> | Trk system potassium uptake protein trkA | 1,04 | -1,01 | -2,57 |
| SL3411 | <i>bfd</i> | Bacterioferritin-associated ferredoxin | -1,31 | 1,29 | -4,45 |
| SL3419 | <i>yheO</i> | Uncharacterized protein yheO | -1,04 | 1,03 | -3,74 |
| SL3420 | <i>fkpA</i> | FKBP-type peptidyl-prolyl cis-trans isomerase fkpA | -1,28 | -1,11 | -2,76 |
| SL3427 | - | ABC Transporter ATPase | 1,05 | 1,01 | 2,68 |
| SL3428 | <i>ydhR</i> | Putative monooxygenase ydhR | 1,17 | 1,08 | 2,59 |
| SL3437 | <i>fic</i> | Probable adenosine monophosphate-protein transferase fic | 1,20 | 1,17 | 2,17 |
| SL3440 | <i>tsgA</i> | Protein tsgA | -1,26 | 1,12 | -2,99 |
| SL3441 | <i>nirB</i> | Nitrite reductase [NAD(P)H] large subunit | -1,07 | 1,83 | -3,09 |
| SL3442 | <i>nirD</i> | Nitrite reductase [NAD(P)H] small subunit | 1,11 | 1,18 | -6,95 |
| SL3443 | <i>nirC</i> | Probable nitrite transporter | 1,18 | 1,04 | -5,91 |
| SL3456 | <i>yrfA</i> | Uncharacterized protein yrfA | -1,06 | 1,19 | 2,46 |
| SL3468 | <i>envZ</i> | Osmolarity sensor protein envZ | -1,07 | -1,61 | -2,23 |
| SL3470 | <i>greB</i> | Transcription elongation factor greB | 1,06 | -22,80 | -59,94 |
| SL3471 | <i>yhgF</i> | Protein yhgF | -1,23 | 2,01 | -1,52 |
| SL3472 | <i>feoA</i> | Ferrous iron transport protein A | -1,03 | 1,53 | -3,17 |
| SL3473 | <i>feoB</i> | Ferrous iron transport protein B | -1,06 | 1,43 | -3,20 |
| SL3474 | <i>feoC</i> | Ferrous iron transport protein C | -1,20 | 1,24 | -2,73 |
| SL3479 | <i>gntT</i> | High-affinity gluconate transporter | 1,06 | -1,22 | 2,22 |
| SL3482 | <i>malT</i> | HTH-type transcriptional regulator malT | 1,22 | 1,26 | 5,14 |
| SL3484 | <i>dinJ</i> | DNA-damage-inducible protein J | 1,04 | 1,37 | 2,15 |
| SL3491 | <i>glpG</i> | Rhomboid protease glpG | -1,03 | -1,07 | -2,04 |
| SL3497 | <i>ttuB</i> | Putative tartrate transporter | 1,09 | 1,05 | 2,60 |
| SL3498 | <i>ilvD</i> | Dihydroxy-acid dehydratase | 1,02 | 1,08 | 3,10 |
| SL3503 | <i>glgC</i> | Glucose-1-phosphate adenyllyltransferase | 1,25 | 1,15 | 2,20 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-------------------|-------------------|-----------------------|
| SL3504 | <i>glgX</i> | Glycogen debranching enzyme | 1,17 | -1,13 | 2,04 |
| SL3505 | <i>glgB</i> | 1,4-alpha-glucan-branched enzyme | 1,20 | -1,03 | 2,35 |
| SL3513 | <i>rbsK</i> | Ribokinase | -1,18 | 1,03 | -2,44 |
| SL3514 | - | Hypothetical | -1,08 | 1,27 | -3,60 |
| SL3515 | - | Hypothetical | -1,08 | -1,01 | -2,67 |
| SL3516 | <i>php</i> | Phosphotriesterase homology protein | 1,01 | -1,07 | -2,76 |
| SL3518 | <i>yhhA</i> | Uncharacterized protein yhhA | 1,13 | 1,56 | 2,39 |
| SL3520 | <i>ugpC</i> | sn-glycerol-3-phosphate import ATP-binding protein UgpC | 1,20 | -1,48 | 4,06 |
| SL3521 | <i>ugpE</i> | sn-glycerol-3-phosphate transport system permease protein ugpE | 1,12 | -1,72 | 3,15 |
| SL3522 | <i>ugpA</i> | sn-glycerol-3-phosphate transport system permease protein ugpA | 1,32 | -1,43 | 3,48 |
| SL3523 | <i>ugpB</i> | sn-glycerol-3-phosphate-binding periplasmic protein ugpB | 1,27 | 1,10 | 12,09 |
| SL3524 | <i>kil</i> | Death On Curing Protein | 1,38 | 1,12 | 4,53 |
| SL3525 | <i>yhhV</i> | Uncharacterized protein yhhV | 1,35 | 1,25 | 4,30 |
| SL3532 | <i>livJ</i> | Leu/Ile/Val-binding protein | -1,06 | 1,01 | 2,72 |
| SL3536 | <i>ftsY</i> | Cell division protein ftsY | 1,05 | 1,09 | -2,07 |
| SL3541 | <i>zntA</i> | Lead, cadmium, zinc and mercury-transporting ATPase | -1,06 | 1,04 | 3,05 |
| SL3542 | <i>tcp</i> | Methyl-accepting chemotaxis citrate transducer | 1,12 | 1,11 | -2,21 |
| SL3543 | <i>tusA</i> | Sulfurtransferase tusA | -1,02 | -1,15 | -11,47 |
| SL3543 | <i>tusA</i> | Sulfurtransferase tusA | -1,02 | -1,15 | -11,47 |
| SL3544 | <i>yhhQ</i> | Inner membrane protein yhhQ | -1,29 | 1,01 | -4,91 |
| SL3552 | <i>yhil</i> | Uncharacterized protein yhil | 1,18 | 1,31 | 2,20 |
| SL3555 | <i>uspB</i> | Universal stress protein B | 1,18 | 1,24 | 2,84 |
| SL3557 | <i>dtpB</i> | Dipeptide and tripeptide permease B | 1,53 | 1,11 | 3,02 |
| SL3559 | <i>prlC</i> | Oligopeptidase A | 1,01 | -1,10 | -2,03 |
| SL3561 | <i>yhiR</i> | Uncharacterized protein yhiR | 1,04 | 1,01 | -2,11 |
| SL3563 | <i>ansB</i> | L-asparaginase | 1,21 | -1,48 | 32,54 |
| SL3564 | <i>dcuB</i> | Anaerobic C4-dicarboxylate transporter dcuB | 1,27 | -1,59 | 55,06 |
| SL3565 | <i>friD</i> | Fructosamine kinase friD | -1,09 | -1,71 | 33,42 |
| SL3566 | <i>friB</i> | Fructosamine deglycase friB | 1,36 | -1,39 | 33,98 |
| SL3566 | <i>friB</i> | Fructosamine deglycase friB | 1,36 | -1,39 | 33,98 |
| SL3569 | - | Hypothetical | 1,19 | 1,25 | 3,95 |
| SL3571 | <i>yhjB</i> | Putative HTH-type transcriptional regulator yhjB | -1,50 | 1,26 | -3,03 |
| SL3572 | <i>yhjC</i> | Uncharacterized HTH-type transcriptional regulator yhjC | 1,07 | -1,06 | 2,24 |
| SL3576 | <i>yhjH</i> | Cyclic di-GMP phosphodiesterase YhjH | -1,44 | 1,20 | -5,37 |
| SL3577 | <i>kdgK</i> | 2-dehydro-3-deoxygluconokinase | 1,12 | -1,08 | 4,32 |
| SL3579 | <i>dctA</i> | C4-dicarboxylate transport protein | -1,06 | -1,17 | 14,63 |
| SL3596 | <i>dppA</i> | Periplasmic dipeptide transport protein | 1,12 | 1,02 | 3,36 |
| SL3598 | - | Hypothetical | -1,38 | -1,04 | -2,34 |
| SL3598 | - | Hypothetical | -1,38 | -1,04 | -2,34 |
| SL3598 | - | Hypothetical | -1,38 | -1,04 | -2,34 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|---|-----------------------|-----------------------|---------------------------|
| SL3608 | <i>tag</i> | DNA-3-methyladenine glycosylase 1 | 1,17 | -1,05 | 2,24 |
| SL3609 | <i>yiaC</i> | Uncharacterized N-acetyltransferase <i>yiaC</i> | 1,15 | -1,16 | 2,67 |
| SL3612 | <i>ghrB</i> | Glyoxylate/hydroxypyruvate reductase B | 1,26 | 1,11 | 2,04 |
| SL3615 | <i>cspA</i> | Cold shock protein <i>cspA</i> | -1,20 | -1,57 | -2,91 |
| SL3625 | <i>xylB</i> | Xylulose kinase | 1,11 | 1,10 | 2,26 |
| SL3626 | <i>xylA</i> | Xylose isomerase | -1,06 | -1,04 | 2,26 |
| SL3628 | <i>bax</i> | Protein <i>bax</i> | -1,39 | 1,03 | -9,21 |
| SL3633 | <i>dlgD</i> | 2,3-diketo-L-gulonate reductase | 1,01 | -1,07 | 4,51 |
| SL3635 | - | Hypothetical | 1,09 | 1,12 | 2,38 |
| SL3637 | <i>yiaN</i> | 2,3-diketo-L-gulonate TRAP transporter large permease protein <i>yiaN</i> | -1,05 | -1,38 | 2,40 |
| SL3638 | <i>yiaO</i> | 2,3-diketo-L-gulonate-binding periplasmic protein <i>yiaO</i> | 1,36 | 1,16 | 4,21 |
| SL3639 | <i>lyxK</i> | L-xylulose/3-keto-L-gulonate kinase | 1,14 | 1,11 | 2,70 |
| SL3641 | <i>sgbU</i> | Putative L-ribulose-5-phosphate 3-epimerase <i>sgbU</i> | 1,45 | 1,69 | 3,77 |
| SL3643 | <i>yisR</i> | Uncharacterized HTH-type transcriptional regulator <i>yisR</i> | 1,24 | -1,19 | 4,41 |
| SL3643 | <i>yisR</i> | Uncharacterized HTH-type transcriptional regulator <i>yisR</i> | 1,24 | -1,19 | 4,41 |
| SL3644 | - | Hypothetical | 1,18 | -1,02 | 4,20 |
| SL3645 | <i>aldB</i> | Aldehyde dehydrogenase B | 1,01 | 1,23 | 2,38 |
| SL3649 | <i>yibF</i> | Uncharacterized GST-like protein <i>yibF</i> | 1,10 | 1,09 | 2,65 |
| SL3650 | <i>mtlA</i> | PTS system mannitol-specific EIICBA component | 1,02 | -1,03 | 3,05 |
| SL3653 | <i>yibT</i> | Uncharacterized protein <i>yibT</i> | 1,13 | 1,35 | 5,71 |
| SL3658 | <i>lldR</i> | Putative L-lactate dehydrogenase operon regulatory protein | -1,51 | -1,00 | 2,62 |
| SL3659 | <i>lldD</i> | L-lactate dehydrogenase [cytochrome] | -1,46 | -1,28 | 3,49 |
| SL3662 | <i>mdlA</i> | Mandelate racemase | 1,18 | 1,01 | 4,34 |
| SL3663 | <i>gudP</i> | Probable glucarate transporter | 1,43 | 1,22 | 4,44 |
| SL3670 | <i>gpmI</i> | 2,3-bisphosphoglycerate-independent phosphoglycerate mutase | -1,03 | 1,15 | -3,23 |
| SL3671 | <i>yibP</i> | Uncharacterized protein <i>yibP</i> | -1,07 | -1,17 | -2,15 |
| SL3674 | <i>tdh</i> | L-threonine 3-dehydrogenase | 1,25 | -1,10 | 3,79 |
| SL3675 | <i>tbl</i> | Putative 8-amino-7-oxononanoate synthase/2-amino-3-ketobutyrate coenzyme A ligase | 1,06 | -1,25 | 2,94 |
| SL3689 | <i>rfaQ</i> | Lipopolysaccharide core heptosyltransferase <i>rfaQ</i> | -1,02 | -1,01 | -2,00 |
| SL3695 | <i>yicR</i> | UPF0758 protein <i>yicR</i> | -1,04 | 1,06 | 3,41 |
| SL3700 | <i>rph</i> | Ribonuclease PH | 1,16 | 1,06 | -2,20 |
| SL3703 | <i>ycbL</i> | Metallo-beta-lactamase L1 | 1,29 | -1,10 | 2,03 |
| SL3704 | <i>yicG</i> | UPF0126 inner membrane protein <i>yicG</i> | 1,20 | 1,15 | -3,47 |
| SL3711 | - | Cytoplasmic Protein | 1,50 | -1,09 | 5,37 |
| SL3712 | <i>gltS</i> | Sodium/glutamate symport carrier protein | 1,44 | 1,03 | 5,98 |
| SL3714 | <i>yicH</i> | Uncharacterized protein <i>yicH</i> | 1,11 | -1,08 | 2,92 |
| SL3715 | <i>yicl</i> | Alpha-xylosidase | 1,25 | 1,16 | 1,98 |
| SL3716 | <i>yicJ</i> | Inner membrane symporter <i>yicJ</i> | 1,23 | -1,03 | 2,54 |
| SL3728 | <i>mgtB</i> | Magnesium-transporting ATPase, P-type 1 | -1,69 | 1,21 | -4,80 |
| SL3729 | <i>mgtC</i> | Protein <i>mgtC</i> | -1,98 | 1,06 | -24,09 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-----------------------|-----------------------|---------------------------|
| SL3738 | <i>levR</i> | Transcriptional regulatory protein levR | 1,15 | 1,07 | 2,12 |
| SL3740 | <i>gmuD</i> | 6-phospho-beta-glucosidase gmuD | 1,31 | 1,12 | 2,95 |
| SL3742 | - | | 1,26 | -1,01 | -4,69 |
| SL3743 | - | Hypothetical | 1,50 | 1,54 | 3,57 |
| SL3744 | <i>yiaG</i> | Transcriptional Regulator XRE Family | 1,35 | 1,35 | 3,84 |
| SL3750 | <i>gatA</i> | PTS IIA-Like Nitrogen-Regulatory Protein PtsN | 1,08 | -1,01 | 1,99 |
| SL3751 | <i>mngR</i> | Mannosyl-D-glycerate transport/metabolism system repressor mngR | 1,24 | 1,41 | 3,65 |
| SL3756 | <i>uhpA</i> | Transcriptional regulatory protein uhpA | -1,11 | 1,19 | -2,39 |
| SL3757 | - | Hypothetical | 1,24 | 1,05 | 3,49 |
| SL3758 | <i>fucP</i> | L-fucose-proton symporter | 1,25 | -1,02 | 3,39 |
| SL3759 | <i>rbsK</i> | Ribokinase | 1,14 | 1,11 | 3,60 |
| SL3760 | <i>deoR</i> | Deoxyribose operon repressor | 1,28 | -1,00 | 2,51 |
| SL3761 | <i>ilvN</i> | Acetolactate synthase isozyme 1 small subunit | 1,53 | 1,09 | 4,96 |
| SL3762 | <i>ilvB</i> | Acetolactate synthase isozyme 1 large subunit | 1,51 | 1,08 | 5,91 |
| SL3767 | - | Hypothetical | 1,23 | -1,00 | 2,32 |
| SL3768 | <i>dsdC</i> | HTH-type transcriptional regulator dsdC | 1,47 | 1,01 | 3,96 |
| SL3769 | <i>dsdX</i> | DsdX permease | 1,23 | 1,23 | 2,10 |
| SL3774 | <i>yidE</i> | Putative transport protein CKO_00031 | 1,42 | 1,43 | 5,60 |
| SL3776 | <i>ibpA</i> | Small heat shock protein ibpA | 1,29 | 1,47 | 3,13 |
| SL3786 | <i>yhjA</i> | Probable cytochrome c peroxidase | -1,07 | -1,11 | -2,69 |
| SL3789 | <i>torC</i> | Cytochrome c-type protein torC | 1,30 | -1,04 | -3,23 |
| SL3790 | <i>torR</i> | TorCAD operon transcriptional regulatory protein torR | 1,28 | -1,04 | 4,44 |
| SL3793 | <i>dgoT</i> | D-galactonate transporter | 1,67 | 1,10 | 2,84 |
| SL3794 | <i>dgoD1</i> | D-galactonate dehydratase 1 | 1,47 | 1,07 | 3,20 |
| SL3795 | <i>dgoA</i> | 2-dehydro-3-deoxy-6-phosphogalactonate aldolase | 1,43 | 1,31 | 2,97 |
| SL3796 | <i>dgoK</i> | 2-dehydro-3-deoxygalactonokinase | 1,05 | -1,14 | 2,37 |
| SL3797 | <i>dgoR</i> | Galactonate operon transcriptional repressor | -1,02 | -1,09 | 2,58 |
| SL3799 | <i>gudP</i> | Probable glucarate transporter | -1,03 | -1,11 | 4,70 |
| SL3800 | <i>dgoD</i> | D-galactonate dehydratase | -1,02 | 1,03 | 3,13 |
| SL3801 | <i>ybhD</i> | Uncharacterized HTH-type transcriptional regulator ybhD | 1,43 | 1,16 | 4,56 |
| SL3805 | <i>dnaA</i> | Chromosomal replication initiator protein dnaA | 1,02 | 1,07 | -2,05 |
| SL3806 | <i>rpmH</i> | 50S ribosomal protein L34 | -1,09 | 1,07 | -2,20 |
| SL3807 | <i>rnpA</i> | Ribonuclease P protein component | -1,08 | 1,00 | -2,10 |
| SL3811 | <i>intA</i> | Prophage CP4-57 integrase | -1,46 | -1,21 | -1,99 |
| SL3814 | <i>mdtL</i> | Multidrug resistance protein mdtL | 1,00 | -1,06 | -3,71 |
| SL3818 | <i>purP</i> | Probable adenine permease PurP | -1,18 | 1,00 | -2,73 |
| SL3827 | <i>sgrR</i> | HTH-type transcriptional regulator sgrR | 1,01 | -1,23 | 2,56 |
| SL3831 | <i>atpC</i> | ATP synthase epsilon chain | 1,19 | 1,07 | 3,56 |
| SL3833 | <i>atpG</i> | ATP synthase gamma chain | 1,01 | -1,31 | 2,51 |
| SL3834 | <i>atpA</i> | ATP synthase subunit alpha | 1,08 | -1,18 | 2,05 |
| SL3835 | <i>atpH</i> | ATP synthase subunit delta | -1,05 | -1,17 | 2,01 |
| SL3842 | <i>mioC</i> | Protein mioC | 1,08 | 1,05 | -2,43 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|---------------|--|-------------------|-------------------|-----------------------|
| SL3848 | <i>rbsD</i> | D-ribose pyranase | -2,94 | -1,06 | -2,87 |
| SL3849 | <i>rbsA1</i> | Ribose import ATP-binding protein RbsA 1 | -3,09 | -1,10 | -2,95 |
| SL3851 | <i>rbsB</i> | D-ribose-binding periplasmic protein | 1,20 | 1,08 | 2,16 |
| SL3857 | <i>yieP</i> | Uncharacterized HTH-type transcriptional regulator yieP | 1,21 | -1,02 | 2,53 |
| SL3861 | <i>ilvG</i> | Acetolactate synthase isozyme 2 large subunit | -1,19 | 1,08 | 3,17 |
| SL3862 | <i>ilvM</i> | Acetolactate synthase isozyme 2 small subunit | -1,01 | 1,08 | 5,19 |
| SL3865 | <i>ilvA</i> | Threonine dehydratase biosynthetic | 1,35 | -1,06 | 2,36 |
| SL3873 | <i>gppA</i> | Guanosine-5'-triphosphate,3'-diphosphate pyrophosphatase | -1,03 | -1,19 | -2,09 |
| SL3874 | <i>rhlB</i> | ATP-dependent RNA helicase rhlB | -1,08 | -1,34 | -2,45 |
| SL3876 | <i>rho</i> | Transcription termination factor rho | -1,08 | 1,01 | -3,61 |
| SL3894 | <i>cyaA</i> | Adenylate cyclase | -1,09 | 1,05 | -2,83 |
| SL3903 | <i>xerC</i> | Tyrosine recombinase xerC | -1,10 | -1,39 | -2,00 |
| SL3906 | <i>corA</i> | Magnesium transport protein corA | -1,33 | 1,07 | -3,08 |
| SL3935 | <i>fadA</i> | 3-ketoacyl-CoA thiolase | -1,12 | -1,11 | 23,14 |
| SL3936 | <i>fadB</i> | Fatty acid oxidation complex subunit alpha | -1,07 | 1,23 | 22,96 |
| SL3955 | <i>typA</i> | GTP-binding protein TypA/BipA | 1,11 | 1,08 | -2,44 |
| SL3961 | - | Hypothetical | -1,19 | -1,13 | 2,67 |
| SL3962 | <i>ompL</i> | Porin ompL | 1,29 | -1,12 | 3,58 |
| SL3963 | <i>yihO</i> | Uncharacterized symporter yihO | 1,17 | -1,02 | 2,27 |
| SL3964 | <i>yihP</i> | Inner membrane symporter yihP | 1,33 | -1,13 | 2,70 |
| SL3965 | <i>yihQ</i> | Alpha-glucosidase yihQ | 1,27 | -1,07 | 2,10 |
| SL3966 | <i>yihR</i> | Uncharacterized protein yihR | 1,04 | -1,09 | 2,30 |
| SL3967 | <i>yihS</i> | Uncharacterized sugar isomerase yihS | 1,06 | -1,19 | 4,13 |
| SL3968 | <i>yihT</i> | Uncharacterized aldolase yihT | -1,06 | -1,69 | 4,63 |
| SL3969 | <i>yihU</i> | Uncharacterized oxidoreductase yihU | 1,17 | -1,17 | 6,23 |
| SL3970 | <i>yihV</i> | Uncharacterized sugar kinase yihV | 1,18 | 1,10 | 3,37 |
| SL3977 | <i>ygjN</i> | Uncharacterized protein ygjN | 1,03 | -1,00 | 2,34 |
| SL3978 | <i>est</i> | Esterase | 1,17 | -1,01 | 3,87 |
| SL3979 | <i>higB-2</i> | Toxin higB-2 | -1,03 | -1,15 | 2,12 |
| SL3980 | - | Transcriptional Regulator XRE Family | 1,06 | -1,11 | 2,21 |
| SL3986 | <i>fdhD</i> | Protein fdhD | -1,04 | 1,08 | -2,32 |
| SL3989 | - | Hypothetical | 1,02 | 1,17 | -2,15 |
| SL3993 | <i>yiaY</i> | Probable alcohol dehydrogenase | 1,63 | 1,51 | 1,98 |
| SL3995 | <i>rhaA</i> | L-rhamnose isomerase | 1,07 | -1,37 | 1,98 |
| SL3997 | <i>rhaS</i> | HTH-type transcriptional activator rhaS | 1,24 | 1,44 | 7,48 |
| SL3998 | <i>rhaR</i> | HTH-type transcriptional activator rhaR | 1,11 | 1,18 | 3,48 |
| SL4012 | <i>sbp</i> | Sulfate-binding protein | 1,43 | 1,13 | 3,15 |
| SL4014 | <i>yagG</i> | Uncharacterized symporter yagG | 1,30 | 1,22 | 6,83 |
| SL4015 | <i>scrK</i> | Fructokinase | 1,32 | 1,14 | 7,32 |
| SL4016 | <i>yegU</i> | Uncharacterized protein yegU | 1,37 | 1,16 | 4,60 |
| SL4018 | - | Hypothetical | -1,08 | 1,22 | -2,00 |
| SL4019 | <i>cdh</i> | CDP-diacylglycerol pyrophosphatase | 1,01 | 1,06 | 2,10 |
| SL4020 | - | Conserved Hypothetical Protein | 1,21 | 1,00 | 3,55 |
| SL4021 | <i>lsrK</i> | Autoinducer 2 kinase lsrK | 1,15 | -1,14 | 5,12 |
| SL4022 | <i>lsrR</i> | Transcriptional regulator lsrR | 1,07 | 1,15 | 5,81 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|---|-------------------|-------------------|-----------------------|
| SL4023 | <i>lsrA</i> | Autoinducer 2 import ATP-binding protein LsrA | -1,19 | 1,31 | 49,79 |
| SL4024 | <i>lsrC</i> | Autoinducer 2 import system permease protein LsrC | -1,24 | -1,20 | 18,13 |
| SL4025 | <i>lsrD</i> | Autoinducer 2 import system permease protein LsrD | -1,14 | -1,11 | 9,85 |
| SL4034 | <i>glpX</i> | Fructose-1,6-bisphosphatase class 2 | -1,05 | -1,50 | 2,09 |
| SL4036 | <i>glpF</i> | Glycerol uptake facilitator protein | 1,03 | -1,01 | 2,43 |
| SL4039 | <i>menA</i> | 1,4-dihydroxy-2-naphthoate octaprenyltransferase | 1,07 | -1,01 | -2,24 |
| SL4044 | <i>priA</i> | Primosomal protein N' | -1,12 | 1,14 | -1,99 |
| SL4047 | - | Arylsulfate Sulfotransferase | 1,05 | -1,06 | 2,61 |
| SL4055 | <i>metF</i> | 5,10-methylenetetrahydrofolate reductase | -1,37 | 1,02 | -3,35 |
| SL4056 | <i>katG1</i> | Catalase-peroxidase 1 | 1,05 | 1,00 | -3,75 |
| SL4057 | <i>yijF</i> | Uncharacterized protein YijF | 1,33 | -1,25 | -8,02 |
| SL4060 | <i>ptsA</i> | Multiphosphoryl transfer protein 2 | 1,41 | 1,33 | 2,52 |
| SL4061 | <i>frwC</i> | Fructose-like permease IIC component 2 | 1,36 | 1,35 | 5,71 |
| SL4062 | <i>frwB</i> | Fructose-like phosphotransferase enzyme IIB component 2 | 1,36 | 1,10 | 3,40 |
| SL4075 | <i>sthA</i> | Soluble pyridine nucleotide transhydrogenase | -1,05 | -1,16 | 2,56 |
| SL4078 | <i>trmA</i> | tRNA (uracil-5)-methyltransferase | 1,06 | 1,07 | -1,99 |
| SL4093 | <i>rpoC</i> | DNA-directed RNA polymerase subunit beta' | 1,17 | 1,01 | 2,04 |
| SL4098 | <i>thiH</i> | Dehydrogycine synthase | 1,23 | 1,13 | 3,47 |
| SL4099 | <i>thiG</i> | Thiazole synthase | 1,42 | 1,35 | 4,86 |
| SL4100 | <i>thiS</i> | Sulfur carrier protein ThiS | 1,69 | 1,23 | 3,53 |
| SL4101 | <i>thiF</i> | Sulfur carrier protein ThiS adenylyltransferase | 1,43 | -1,04 | 4,02 |
| SL4102 | <i>thiE</i> | Thiamine-phosphate pyrophosphorylase | 1,31 | -1,10 | 3,49 |
| SL4103 | <i>thiC</i> | Phosphomethylpyrimidine synthase | 1,36 | 1,01 | 3,16 |
| SL4104 | <i>rsd</i> | Regulator of sigma D | -1,03 | 1,26 | 3,58 |
| SL4111 | <i>zraP</i> | Zinc resistance-associated protein | 1,57 | 1,64 | -2,57 |
| SL4112 | <i>zraS</i> | Sensor protein ZraS | 1,18 | -1,03 | 2,34 |
| SL4118 | <i>aceB</i> | Malate synthase A | -1,09 | -1,09 | 7,52 |
| SL4119 | <i>aceA</i> | Isocitrate lyase | -1,27 | -1,09 | 4,68 |
| SL4121 | - | Hypothetical | -1,13 | -1,65 | 2,21 |
| SL4122 | <i>iclR</i> | Acetate operon repressor | -1,08 | -1,37 | 2,81 |
| SL4124 | <i>yjbB</i> | Uncharacterized protein YjbB | 1,09 | 1,02 | 2,28 |
| SL4131 | - | Hypothetical | 1,02 | -1,17 | -4,83 |
| SL4134 | - | Cytoplasmic Protein | -1,01 | -1,23 | 2,11 |
| SL4140 | <i>gtrB</i> | SfiI prophage-derived bactoprenol glucosyl transferase | -1,15 | 1,03 | -2,31 |
| SL4142 | - | Phage Baseplate Assembly Protein V | 1,32 | 1,09 | 3,49 |
| SL4143 | - | Late Control D Family Protein | 1,23 | -1,09 | 2,56 |
| SL4144 | - | Bacteriophage Tail Fibre Protein | 1,42 | 1,06 | 2,50 |
| SL4145 | - | Hypothetical | 1,19 | -1,01 | 2,10 |
| SL4146 | - | Phage Tail Protein | 1,06 | -1,16 | 2,84 |
| SL4147 | - | Hypothetical | 1,02 | 1,02 | 2,44 |
| SL4159 | <i>yjbF</i> | Uncharacterized lipoprotein YjbF | -1,15 | 1,05 | -2,28 |
| SL4162 | <i>psiE</i> | Protein PsiE | -1,22 | 1,16 | -3,30 |
| SL4165 | - | Hypothetical Protein SL4165 | -1,19 | -1,46 | 2,30 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-----------------------|-----------------------|---------------------------|
| SL4167 | <i>malK</i> | Maltose+C3582/maltodextrin import ATP-binding protein MalK | -1,91 | -2,04 | 1,67 |
| SL4170 | <i>ubiC</i> | Chorismate--pyruvate lyase | 1,29 | 1,13 | 2,11 |
| SL4174 | <i>lexA</i> | LexA repressor | 1,13 | 1,16 | 2,28 |
| SL4180 | <i>pspG</i> | Phage shock protein G | -1,04 | 1,32 | -2,02 |
| SL4185 | <i>aphA</i> | Class B acid phosphatase | -1,19 | -1,10 | 2,41 |
| SL4191 | - | Cytoplasmic Protein | -1,16 | 1,03 | -2,80 |
| SL4193 | <i>siiA</i> | Hypothetical | -2,30 | -1,86 | -26,54 |
| SL4194 | <i>siiB</i> | Integral Membrane Protein | -2,14 | -1,76 | -26,23 |
| SL4195 | <i>siiC</i> | Outer membrane protein tolC | -2,10 | -1,38 | -22,66 |
| SL4196 | <i>siiD</i> | Proteases secretion protein prtE | -1,96 | -1,42 | -31,87 |
| SL4197 | <i>siiiE</i> | Hypothetical | -1,31 | 1,08 | -18,80 |
| SL4198 | <i>siiF</i> | Leukotoxin translocation ATP-binding protein lktB | -2,25 | -1,23 | -46,89 |
| SL4199 | <i>yjcB</i> | Uncharacterized protein yjcB | -1,49 | 1,15 | -9,86 |
| SL4200 | <i>yjcC</i> | Uncharacterized protein yjcC | -1,93 | 1,10 | -3,42 |
| SL4201 | <i>soxS</i> | Regulatory protein soxS | -1,57 | -1,10 | -3,63 |
| SL4207 | <i>cidA</i> | Holin-like protein cidA | -1,10 | -1,01 | -19,38 |
| SL4208 | <i>ywbG</i> | Uncharacterized protein ywbG | -1,18 | -1,29 | -19,43 |
| SL4209 | <i>actP</i> | Cation/acetate symporter ActP | -1,02 | -1,45 | 13,02 |
| SL4210 | <i>yjcH</i> | Inner membrane protein yjcH | 1,08 | -1,46 | 39,97 |
| SL4211 | <i>acs</i> | Acetyl-coenzyme A synthetase | -1,26 | -1,40 | 21,68 |
| SL4212 | - | Hypothetical | -1,04 | 1,03 | 3,32 |
| SL4213 | <i>nrfA</i> | Cytochrome c-552 | 1,17 | 1,40 | 2,13 |
| SL4221 | <i>fdhF</i> | Formate dehydrogenase H | 1,16 | 1,06 | -2,29 |
| SL4231 | <i>adiC</i> | Arginine/agmatine antiporter | -1,10 | -1,77 | -4,64 |
| SL4234 | <i>melR</i> | Melibiose operon regulatory protein | 1,19 | 1,12 | 6,19 |
| SL4236 | <i>melB</i> | Melibiose carrier protein | 2,07 | -1,79 | 1,46 |
| SL4238 | <i>dcuB</i> | Anaerobic C4-dicarboxylate transporter dcuB | 1,02 | 1,56 | -11,02 |
| SL4239 | - | Hypothetical | -1,18 | 1,39 | -24,27 |
| SL4247 | <i>yjiK</i> | Uncharacterized protein yjiK | -1,74 | 1,10 | -24,46 |
| SL4248 | - | Hypothetical | -2,43 | -1,91 | -28,20 |
| SL4248 | - | Hypothetical | -2,43 | -1,91 | -28,20 |
| SL4249 | - | Cytoplasmic Protein | -3,07 | -2,48 | -41,36 |
| SL4250 | <i>rtsB</i> | GerE Family Regulatory Protein | -3,14 | -2,47 | -60,33 |
| SL4251 | <i>rtsA</i> | Transcriptional regulator sirC | -2,64 | -1,89 | -47,96 |
| SL4252 | - | Hypothetical | -1,52 | 1,12 | -5,47 |
| SL4253 | - | Hypothetical | -1,44 | 1,09 | -2,43 |
| SL4260 | <i>dsbD</i> | Thiol:disulfide interchange protein dsbD | -1,04 | -1,45 | -2,77 |
| SL4261 | <i>cutA</i> | Divalent-cation tolerance protein cutA | -1,04 | -1,19 | -2,17 |
| SL4266 | <i>groS</i> | 10 kDa chaperonin | 1,19 | 1,04 | 3,79 |
| SL4267 | <i>groL</i> | 60 kDa chaperonin | 1,17 | -1,02 | 2,58 |
| SL4270 | <i>yjeK</i> | Uncharacterized KamA family protein YjeK | 1,08 | 1,01 | -2,15 |
| SL4281 | <i>yjeA</i> | Uncharacterized protein YjeA | -1,18 | -1,30 | -2,31 |
| SL4282 | <i>yjeM</i> | Inner membrane transporter yjeM | -1,01 | -1,06 | -3,47 |
| SL4310 | <i>aidB</i> | Protein AidB | 1,35 | 1,22 | 9,60 |
| SL4311 | <i>yjfN</i> | Uncharacterized protein yjfN | 1,41 | 1,24 | 6,64 |
| SL4312 | <i>bsmA</i> | Lipoprotein BsmA | 1,31 | 1,21 | 5,00 |
| SL4313 | <i>yjfP</i> | Esterase yjfP | 1,04 | 1,03 | 2,55 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|--------------|--|-------------------|-------------------|-----------------------|
| SL4315 | <i>ulaG</i> | Probable L-ascorbate-6-phosphate lactonase ulaG | 1,10 | 1,15 | 2,27 |
| SL4316 | <i>ulaA</i> | Ascorbate-specific permease IIC component ulaA | 1,34 | 1,14 | 9,06 |
| SL4317 | <i>ulaB</i> | Ascorbate-specific phosphotransferase enzyme IIB component | 1,29 | 1,06 | 6,92 |
| SL4318 | <i>ulaC</i> | Ascorbate-specific phosphotransferase enzyme IIA component | 1,14 | -1,11 | 5,04 |
| SL4319 | <i>ulaD</i> | 3-keto-L-gulonate-6-phosphate decarboxylase ulaD | 1,23 | -1,49 | 3,02 |
| SL4320 | <i>ulaE</i> | L-ribulose-5-phosphate 3-epimerase ulaE | 1,06 | -1,20 | 2,25 |
| SL4327 | <i>rplL</i> | 50S ribosomal protein L9 | -1,15 | 1,10 | -2,28 |
| SL4329 | <i>ytfB</i> | Uncharacterized protein ytfB | 1,24 | 1,19 | 2,09 |
| SL4333 | <i>ytfF</i> | Inner membrane protein ytfF | 1,15 | 1,22 | 2,16 |
| SL4334 | <i>qorB</i> | Quinone oxidoreductase 2 | 1,06 | 1,26 | 2,70 |
| SL4336 | <i>cpdB</i> | 2',3'-cyclic-nucleotide 2'-phosphodiesterase/3'-nucleotidase | 1,31 | 1,04 | 4,00 |
| SL4338 | <i>ytfJ</i> | Uncharacterized protein ytfJ | -1,19 | 1,16 | 2,51 |
| SL4340 | <i>ytfL</i> | UPF0053 inner membrane protein ytfL | -1,12 | -1,16 | -2,96 |
| SL4341 | <i>msrA</i> | Peptide methionine sulfoxide reductase msrA | -1,09 | 1,23 | 2,87 |
| SL4350 | <i>hexR</i> | Uncharacterized HTH-type transcriptional regulator HI_0143 | -1,08 | 1,02 | -2,14 |
| SL4351 | <i>xylE</i> | D-xylose-proton symporter | 1,00 | -1,60 | 7,99 |
| SL4353 | <i>iolB</i> | 5-deoxy-glucuronate isomerase | 1,33 | 1,06 | 3,00 |
| SL4354 | <i>iolA1</i> | Methylmalonate semialdehyde dehydrogenase [acylating] 1 | 1,29 | 1,10 | 3,93 |
| SL4355 | <i>ydiP</i> | Uncharacterized HTH-type transcriptional regulator ydiP | 1,09 | 1,48 | 6,37 |
| SL4359 | <i>iolI</i> | Inosose isomerase | 1,20 | -1,01 | 2,12 |
| SL4361 | <i>iolC</i> | 5-dehydro-2-deoxygluconokinase | 1,02 | -1,26 | 5,41 |
| SL4362 | <i>iolD1</i> | 3D-(3,5/4)-trihydroxycyclohexane-1,2-dione hydrolase 1 | 1,04 | -1,38 | 5,81 |
| SL4365 | - | Xylose Isomerase Domain-Containing Protein | 1,03 | -1,04 | 2,81 |
| SL4366 | <i>iolH</i> | Protein iolH | 1,00 | -1,15 | 2,02 |
| SL4369 | <i>cybC</i> | Soluble cytochrome b562 | 1,05 | 1,04 | 2,03 |
| SL4371 | - | Hypothetical | 1,37 | 1,18 | 2,22 |
| SL4372 | - | Hypothetical | 1,39 | 1,09 | 2,71 |
| SL4373 | - | Hypothetical | 1,09 | 1,02 | 2,64 |
| SL4374 | - | Hypothetical | 1,13 | 1,07 | 2,36 |
| SL4375 | - | Dihydroorotate | 1,22 | -1,08 | 2,21 |
| SL4376 | <i>selA</i> | Uncharacterized protein mlr3804 | 1,21 | 1,00 | 2,54 |
| SL4377 | - | Hypothetical | 1,23 | -1,01 | 2,59 |
| SL4381 | <i>nrdG</i> | Anaerobic ribonucleoside-triphosphate reductase-activating protein | 1,27 | -1,20 | -2,24 |
| SL4382 | <i>nrdD</i> | Anaerobic ribonucleoside-triphosphate reductase | 1,27 | -1,05 | -2,21 |
| SL4384 | <i>treC</i> | Trehalose-6-phosphate hydrolase | -1,16 | 1,06 | 2,06 |
| SL4385 | <i>treB</i> | PTS system trehalose-specific EIIBC component | 1,06 | 1,34 | 2,48 |
| SL4387 | <i>mgtA</i> | Magnesium-transporting ATPase, P-type 1 | -1,61 | 1,04 | -2,08 |
| SL4393 | <i>argR</i> | Arginine repressor | 2,49 | 1,35 | -1,35 |
| SL4394 | <i>yfcC</i> | Uncharacterized protein HI_0594 | 2,59 | 1,62 | -1,71 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-------------------|-------------------|-----------------------|
| SL4395 | <i>arcB</i> | Ornithine carbamoyltransferase, catabolic | 2,46 | 1,57 | -1,54 |
| SL4397 | <i>arcA</i> | Arginine deiminase | 2,65 | 2,16 | 1,41 |
| SL4402 | <i>ytgA</i> | Uncharacterized protein <i>ytgA</i> | 1,31 | -1,20 | 2,30 |
| SL4406 | <i>holC</i> | DNA polymerase III subunit chi | 1,13 | -1,20 | 2,20 |
| SL4407 | <i>pepA</i> | Probable cytosol aminopeptidase | 1,17 | -1,08 | 2,78 |
| SL4412 | <i>idnT</i> | Gnt-II system L-idonate transporter | 1,58 | -1,02 | 3,38 |
| SL4413 | <i>idnO</i> | Gluconate 5-dehydrogenase | 1,50 | -1,24 | 3,80 |
| SL4414 | <i>idnD</i> | L-idonate 5-dehydrogenase | 1,71 | -1,04 | 4,59 |
| SL4415 | <i>idnK</i> | Thermosensitive gluconokinase | 1,14 | 1,03 | 2,28 |
| SL4419 | - | Restriction Endonuclease | 1,20 | 1,05 | 2,21 |
| SL4429 | <i>yeeN</i> | UPF0082 protein LACR_0237 | 1,08 | -1,07 | -2,10 |
| SL4430 | <i>yjhP</i> | Uncharacterized protein <i>yjhP</i> | 1,27 | 1,18 | 2,26 |
| SL4431 | - | UPF0386 protein KPN78578_02510 | 1,35 | 1,24 | 2,78 |
| SL4434 | - | Hypothetical | -2,10 | 1,20 | -4,98 |
| SL4435 | - | Hypothetical | -1,43 | 1,10 | -2,04 |
| SL4438 | <i>trpS</i> | Tryptophanyl-tRNA synthetase | -1,02 | -1,11 | 2,21 |
| SL4450 | <i>ssdA</i> | Succinate-semialdehyde dehydrogenase [NADP+] | 1,49 | 1,45 | 2,77 |
| SL4451 | - | Hypothetical | 1,32 | -1,32 | 2,30 |
| SL4457 | <i>hsdR</i> | Type I restriction enzyme EcoKI R protein | 1,09 | 1,02 | 2,34 |
| SL4459 | - | Hypothetical | 1,29 | 1,33 | 2,48 |
| SL4460 | - | Hypothetical | 1,26 | 1,49 | 3,02 |
| SL4462 | <i>yjiX</i> | Uncharacterized protein <i>yjiX</i> | -1,09 | -1,08 | -2,97 |
| SL4463 | <i>yjiY</i> | Inner membrane protein <i>yjiY</i> | 1,11 | 1,19 | -18,87 |
| SL4464 | <i>tsr</i> | Methyl-accepting chemotaxis protein I | -1,03 | -1,00 | -2,50 |
| SL4465 | <i>levR</i> | Transcriptional regulatory protein <i>levR</i> | 1,19 | 1,17 | 1,99 |
| SL4466 | <i>manX</i> | PTS System Fructocific IIA Component | 2,51 | 1,25 | 13,66 |
| SL4467 | <i>manX</i> | Probable phosphotransferase enzyme IIB component M6_Spy0801 | 1,80 | -1,22 | 15,83 |
| SL4468 | <i>agaC</i> | N-acetylgalactosamine permease IIC component 1 | 2,23 | -1,04 | 17,29 |
| SL4469 | <i>manZ</i> | Mannose permease IID component | 2,24 | 1,09 | 14,20 |
| SL4470 | <i>glmS</i> | Glucosamine--fructose-6-phosphate aminotransferase [isomerizing] | 3,29 | 1,02 | 23,21 |
| SL4471 | <i>friB</i> | Fructosamine deglycase <i>friB</i> | 2,57 | 1,34 | 14,58 |
| SL4484 | <i>rsmC</i> | Ribosomal RNA small subunit methyltransferase C | 1,03 | -1,07 | -2,63 |
| SL4496 | <i>deoB</i> | Phosphopentomutase | -1,09 | -1,00 | -2,17 |
| SL4500 | <i>yhcA</i> | Uncharacterized fimbrial chaperone <i>yhcA</i> | -1,65 | -1,01 | -1,99 |
| SL4509 | <i>slt</i> | Soluble lytic murein transglycosylase | 1,26 | -1,04 | 2,00 |
| SL4510 | <i>trpR</i> | Trp operon repressor | 1,10 | -1,25 | 2,05 |
| SLP1_0013 | <i>traQ</i> | Protein <i>traQ</i> | 1,07 | -1,04 | 2,12 |
| SLP1_0022 | <i>traC</i> | Protein <i>traC</i> | 1,31 | -1,11 | 2,12 |
| SLP1_0025 | <i>traV</i> | Protein <i>TraV</i> | 1,03 | -1,17 | 2,31 |
| SLP1_0026 | <i>trbD</i> | Conjugal Transfer Protein <i>TrbD</i> | 1,16 | 1,24 | 2,84 |
| SLP1_0039 | <i>yubM</i> | Uncharacterized protein <i>yubM</i> | -1,01 | -1,02 | 2,75 |
| SLP1_0043 | - | Hypothetical | 1,34 | 1,21 | 2,35 |
| SLP1_0054 | <i>parB</i> | Plasmid Partition par B protein | 1,09 | 1,12 | 5,19 |
| SLP1_0055 | <i>parA</i> | Plasmid partition protein A | -1,14 | -1,37 | 5,75 |
| SLP1_0057 | - | Cytoplasmic Protein | 1,14 | -1,02 | 2,77 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs WT | greB vs WT | greAgreB vs WT |
|-----------|-------------|--|-----------------------|-----------------------|---------------------------|
| SLP1_0058 | - | Uncharacterized protein pSLT049 | 1,01 | -1,09 | 2,85 |
| SLP1_0059 | - | Myosin Heavy Chain Gizzard Smooth | -1,00 | 1,14 | 2,65 |
| SLP1_0065 | - | Insertion element IS630 uncharacterized 39 kDa protein | 1,15 | 1,14 | -2,02 |
| SLP1_0067 | <i>spvA</i> | 28.1 kDa virulence protein | -1,35 | 1,10 | -6,22 |
| SLP1_0068 | <i>vsdC</i> | 65 kDa virulence protein | -1,39 | 1,03 | -12,28 |
| SLP1_0069 | <i>spvC</i> | 27.5 kDa virulence protein | -1,59 | -1,30 | -34,55 |
| SLP1_0070 | <i>vsdE</i> | Virulence protein <i>vsdE</i> | -1,34 | -1,34 | -10,27 |
| SLP1_0077 | - | Cytoplasmic Protein | -1,01 | -1,14 | 2,14 |
| SLP1_0079 | <i>ccdB</i> | Cytotoxic protein CcdB | -1,01 | -1,01 | 2,35 |
| SLP1_0080 | <i>ccdA</i> | Protein CcdA | 1,08 | 1,02 | 2,95 |
| SLP1_0086 | <i>papB</i> | Major pilu subunit operon regulatory protein <i>papB</i> | 1,95 | 2,29 | -1,65 |
| SLP1_0087 | <i>fedA</i> | F107 fimbrial protein | 1,31 | 1,36 | 2,72 |
| SLP1_0096 | <i>pagC</i> | Virulence membrane protein pagC | 1,40 | 1,04 | 2,84 |
| SLP2_0003 | - | Hypothetical | 1,01 | 1,12 | 4,59 |
| SLP2_0004 | - | Addiction Module Antitoxin | 1,09 | 1,15 | 3,55 |
| SLP2_0005 | <i>dnaQ</i> | Uncharacterized protein pSLT049 | 1,03 | 1,28 | 4,21 |
| SLP2_0006 | - | <i>viria25</i> | 1,03 | 1,12 | 1,99 |
| SLP2_0009 | - | Hypothetical | -1,52 | -1,18 | 2,29 |
| SLP2_0011 | - | Uncharacterized protein in cib 5'region | 1,10 | 1,08 | 5,04 |
| SLP2_0012 | <i>cib</i> | Colicin-lb | 1,33 | 1,46 | 4,20 |
| SLP2_0015 | - | Hypothetical | -1,09 | -1,09 | 2,04 |
| SLP2_0016 | - | Hypothetical | -1,09 | -1,31 | 2,65 |
| SLP2_0017 | <i>resD</i> | Resolvase | -1,24 | -1,45 | 2,37 |
| SLP2_0020 | - | Hypothetical | -1,03 | -1,12 | 2,26 |
| SLP2_0029 | <i>yubF</i> | Uncharacterized protein <i>yubF</i> | 1,32 | 1,06 | 2,34 |
| SLP2_0030 | - | Uncharacterized protein <i>yubG</i> | 1,40 | 1,39 | 2,83 |
| SLP2_0031 | <i>yubH</i> | Uncharacterized protein <i>yubH</i> | -1,04 | -1,23 | 2,24 |
| SLP2_0032 | <i>yubI</i> | Putative antirestriction protein YubI | 1,27 | 1,21 | 3,00 |
| SLP2_0033 | <i>yubJ</i> | Uncharacterized protein <i>yubJ</i> | 1,06 | 1,04 | 3,01 |
| SLP2_0036 | <i>yubM</i> | Uncharacterized protein <i>yubM</i> | 1,09 | 1,12 | 2,51 |
| SLP2_0037 | <i>psiB</i> | Protein <i>psiB</i> | 1,24 | 1,17 | 4,39 |
| SLP2_0038 | <i>psiA</i> | Protein <i>psiA</i> | 1,23 | 1,09 | 5,34 |
| SLP2_0039 | - | Hypothetical | 1,36 | 1,11 | 4,78 |
| SLP2_0044 | <i>yfcl</i> | Uncharacterized protein pSLT051 | 1,09 | 1,07 | 2,09 |
| SLP2_0063 | - | Hypothetical | 1,03 | 1,08 | -2,42 |
| SLP2_0064 | - | TraQ Protein | 1,13 | 1,18 | -2,04 |
| SLP2_0078 | - | Hypothetical | 1,48 | 1,07 | 3,93 |
| SLP2_0079 | - | Hypothetical | 1,29 | 1,13 | 3,02 |
| SLP2_0086 | - | Preplin Peptidase | -1,08 | -1,21 | -3,05 |
| SLP2_0087 | <i>pbl</i> | Peptidoglycan-binding-like protein | 1,09 | 1,03 | -2,03 |
| SLP3_0001 | <i>sull</i> | Dihydropteroate synthase type-2 | 1,09 | 1,00 | -2,14 |
| SLP3_0004 | <i>repA</i> | Regulatory protein <i>repA</i> | 1,20 | 1,20 | 2,05 |
| SLP3_0005 | - | Hypothetical Protein SLP3_0005 | 1,08 | 1,10 | 2,21 |
| SLP3_0006 | - | Hypothetical Protein SLP3_0006 | 1,15 | 1,23 | 2,23 |
| SLP3_0007 | <i>mobA</i> | Mobilization protein A | 1,27 | 1,09 | 2,75 |
| SLP3_0008 | <i>mobA</i> | Mobilization protein A | 1,39 | 1,26 | 2,71 |

Tabla suplementaria 2Genes afectados en las cepas mutantes *greA*, *greB* y *greAgreB* respecto a la cepa WT

| ID | gene | Description | greA vs | greB vs | greAgreB |
|-----------|-------------|------------------------|---------|---------|----------|
| | | | WT | WT | vs WT |
| SLP3_0009 | <i>mobB</i> | Mobilization protein B | 1,30 | 1,14 | 2,64 |
| SLP3_0011 | <i>mobC</i> | Mobilization protein C | 1,12 | 1,04 | 3,03 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|--------------|---|--------------------------|------------------------------|
| SL0036 | <i>betC</i> | Choline-sulfatase | 1,70 | 3,95 |
| SL0043 | <i>xylP</i> | Putative xylose-proton symporter | 5,23 | 7,93 |
| SL0044 | <i>rpsT</i> | 30S ribosomal protein S20 | 1,12 | -3,04 |
| SL0052 | <i>rihC</i> | Non-specific ribonucleoside hydrolase rihC | 1,74 | 3,12 |
| SL0057 | <i>oadG1</i> | Probable oxaloacetate decarboxylase gamma chain 1 | 8,83 | 4,14 |
| SL0058 | <i>citS</i> | Citrate-sodium symporter | 9,18 | 3,02 |
| SL0059 | <i>citC</i> | [Citrate [pro-3S]-lyase] ligase | 10,46 | 1,87 |
| SL0060 | <i>citD2</i> | Citrate lyase acyl carrier protein 2 | 3,43 | 1,73 |
| SL0061 | <i>citE</i> | Citrate lyase subunit beta | 12,65 | 7,85 |
| SL0062 | <i>citF</i> | Citrate lyase alpha chain | 6,04 | 5,71 |
| SL0063 | <i>citX</i> | Apo-citrate lyase phosphoribosyl-dephospho-CoA transferase | 4,27 | 2,72 |
| SL0066 | - | Hypothetical | -4,07 | -4,48 |
| SL0074 | <i>caiA</i> | Crotonobetainyl-CoA dehydrogenase | 3,58 | 1,33 |
| SL0075 | <i>caiT</i> | L-carnitine/gamma-butyrobetaine antiporter | 9,31 | 1,83 |
| SL0076 | <i>fixA</i> | Protein fixA | 3,23 | 1,64 |
| SL0077 | <i>fixB</i> | Protein fixB | 3,01 | 1,73 |
| SL0102 | <i>araA</i> | L-arabinose isomerase | 5,26 | 2,50 |
| SL0103 | <i>araB</i> | Ribulokinase | 7,11 | 3,31 |
| SL0104 | <i>araC</i> | Arabinose operon regulatory protein | 9,28 | 10,58 |
| SL0111 | <i>leuC1</i> | 3-isopropylmalate dehydratase large subunit 1 | 1,11 | 3,98 |
| SL0112 | <i>leuB</i> | 3-isopropylmalate dehydrogenase | -1,13 | 3,10 |
| SL0144 | <i>ppdD</i> | Prephilin peptidase-dependent protein D | 3,64 | 2,04 |
| SL0153 | <i>aceF</i> | Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex | 2,66 | 3,97 |
| SL0159 | <i>acnB</i> | Aconitate hydratase 2 | 1,23 | 3,83 |
| SL0160 | - | Restriction Endonuclease | -3,43 | -2,18 |
| SL0163 | <i>ygbK</i> | Uncharacterized protein HI_1011 | 1,59 | 4,11 |
| SL0178 | <i>fimF</i> | Fimbrial subunit type 1 | 2,50 | 3,27 |
| SL0183 | <i>panB</i> | 3-methyl-2-oxobutanoate hydroxymethyltransferase | 4,25 | -1,33 |
| SL0186 | <i>gluQ</i> | Glutamyl-Q tRNA(Asp) synthetase | -45,85 | -3,74 |
| SL0187 | <i>dksA</i> | DnaK suppressor protein | -818,57 | 1,21 |
| SL0196 | <i>smfA</i> | Fimbria A protein | -1,80 | 3,38 |
| SL0211 | <i>cdaR</i> | Carbohydrate diacid regulator | 5,18 | 4,32 |
| SL0212 | <i>yaeH</i> | UPF0325 protein ESA_03178 | 3,85 | 3,29 |
| SL0244 | <i>yaeB</i> | UPF0066 protein yaeB | -3,80 | -2,27 |
| SL0255 | <i>mltD</i> | Membrane-bound lytic murein transglycosylase D | -4,66 | -6,32 |
| SL0266 | <i>clpB</i> | Chaperone protein clpB | 1,30 | 3,43 |
| SL0267 | - | Hypothetical | 1,66 | 3,82 |
| SL0295 | - | Lipoprotein | -3,63 | -1,63 |
| SL0305 | <i>fadE</i> | Acyl-coenzyme A dehydrogenase | 3,82 | 9,79 |
| SL0336 | - | Transmembrane Regulator | -4,37 | -3,98 |
| SL0344 | <i>yjeI</i> | Uncharacterized protein yjeI | 2,68 | 3,73 |
| SL0348 | <i>actP</i> | Copper-transporting P-type ATPase | 1,67 | 4,15 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|-------------|--|--------------------------|------------------------------|
| SL0360 | <i>yahN</i> | Uncharacterized membrane protein <i>yahN</i> | 5,41 | 3,45 |
| SL0363 | <i>prpB</i> | Methylisocitrate lyase | -3,95 | 2,74 |
| SL0364 | <i>prpC</i> | 2-methylcitrate synthase | -2,42 | 5,33 |
| SL0365 | <i>prpD</i> | 2-methylcitrate dehydratase | -1,50 | 6,64 |
| SL0366 | <i>prpE</i> | Propionate--CoA ligase | -1,92 | 4,91 |
| SL0369 | <i>yaiV</i> | Uncharacterized protein <i>yaiV</i> | -3,52 | -1,73 |
| SL0371 | <i>sbmA</i> | Protein <i>sbmA</i> | -3,76 | -2,98 |
| SL0376 | - | Extensin Family Protein | 1,68 | 4,71 |
| SL0377 | <i>mdtG</i> | Multidrug resistance protein <i>mdtG</i> | -3,46 | -2,63 |
| SL0396 | <i>malZ</i> | Maltodextrin glucosidase | 4,43 | -1,05 |
| SL0407 | <i>tsx</i> | Nucleoside-specific channel-forming protein <i>tsx</i> | 3,41 | 1,90 |
| SL0433 | <i>cyoE</i> | Protoheme IX farnesyltransferase | 4,16 | 11,62 |
| SL0434 | <i>cyoD</i> | Cytochrome c ubiquinol oxidase protein <i>cyoD</i> | 5,08 | 13,42 |
| SL0435 | <i>cyoC</i> | Cytochrome c ubiquinol oxidase subunit 3 | 4,41 | 13,28 |
| SL0436 | <i>cyoB</i> | Ubiquinol oxidase subunit 1 | 2,57 | 5,97 |
| SL0437 | <i>cyoA</i> | Ubiquinol oxidase subunit 2 | 2,05 | 6,05 |
| SL0446 | <i>ppiD</i> | Peptidyl-prolyl cis-trans isomerase D | -3,61 | -1,27 |
| SL0450 | <i>ybaE</i> | Uncharacterized protein <i>ybaE</i> | 3,86 | 6,33 |
| SL0480 | <i>htpG</i> | Chaperone protein <i>htpG</i> | 1,50 | 3,68 |
| SL0482 | <i>hemH</i> | Ferrochelatase | -9,75 | -8,01 |
| SL0485 | <i>ybaL</i> | Inner membrane protein <i>ybaL</i> | -3,63 | -1,70 |
| SL0487 | <i>ushA</i> | Protein <i>ushA</i> | 5,19 | 4,38 |
| SL0502 | - | Outer Membrane Protein | 4,41 | 2,30 |
| SL0507 | <i>allS</i> | HTH-type transcriptional activator <i>AllS</i> | 1,77 | 7,16 |
| SL0510 | <i>gcl</i> | Glyoxylate carboligase | 1,60 | 7,44 |
| SL0511 | <i>hyi</i> | Hydroxypyruvate isomerase | 1,80 | 10,16 |
| SL0512 | <i>glxR</i> | 2-hydroxy-3-oxopropionate reductase | 1,44 | 5,13 |
| SL0513 | <i>yybO</i> | Uncharacterized transporter <i>yybO</i> | 1,01 | 4,88 |
| SL0515 | <i>ybbW</i> | Putative allantoin permease | 1,49 | 3,89 |
| SL0520 | <i>allC</i> | Allantoate amidohydrolase | 2,19 | 3,13 |
| SL0521 | <i>allD</i> | Ureidoglycolate dehydrogenase | 3,62 | 5,10 |
| SL0522 | <i>fdrA</i> | Protein <i>fdrA</i> | 1,84 | 3,41 |
| SL0523 | <i>ylbE</i> | Uncharacterized protein <i>ylbE</i> | 1,51 | 3,61 |
| SL0536 | <i>sfaM</i> | Fimbrial subunit type 1 | -6,11 | -9,56 |
| SL0537 | <i>fimI</i> | Putative fimbrin-like protein <i>fimI</i> | -9,92 | -17,41 |
| SL0538 | <i>fimC</i> | Chaperone protein <i>fimC</i> | -12,54 | -22,44 |
| SL0539 | <i>fimD</i> | Outer membrane usher protein <i>fimD</i> | -4,82 | -5,31 |
| SL0540 | <i>fimH</i> | Protein <i>fimH</i> | -3,62 | -2,74 |
| SL0544 | - | Hypothetical | -3,69 | -2,09 |
| SL0551 | <i>ykgD</i> | Uncharacterized HTH-type transcriptional regulator <i>ykgD</i> | -1,11 | 3,20 |
| SL0556 | <i>pheP</i> | Phenylalanine-specific permease | 3,17 | -1,29 |
| SL0559 | <i>levR</i> | Transcriptional regulatory protein <i>levR</i> | 4,63 | 2,64 |
| SL0588 | <i>cstA</i> | Carbon starvation protein A | 4,30 | 9,48 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|--------------|---|--------------------------|------------------------------|
| SL0589 | <i>ybdD</i> | Uncharacterized protein ybdD | 2,74 | 9,97 |
| SL0593 | <i>ybdN</i> | Uncharacterized protein ybdN | -2,98 | -1,24 |
| SL0596 | <i>ahpC</i> | Alkyl hydroperoxide reductase subunit C | -3,65 | -2,32 |
| SL0597 | <i>ahpF</i> | Alkyl hydroperoxide reductase subunit F | -3,53 | -2,42 |
| SL0598 | <i>ynfI</i> | Cytoplasmic Chaperone rD Family Protein | -2,26 | -3,67 |
| SL0606 | <i>citT</i> | Citrate carrier | 4,10 | -1,87 |
| SL0607 | <i>citG2</i> | Probable 2-(5"-triphosphoribosyl)-3'-dephosphocoenzyme-A synthase 2 | 5,25 | -1,25 |
| SL0608 | <i>citX</i> | Apo-citrate lyase phosphoribosyl-dephospho-CoA transferase | 18,14 | -1,87 |
| SL0609 | <i>citF</i> | Citrate lyase alpha chain | 21,53 | -1,61 |
| SL0610 | <i>citE</i> | Citrate lyase subunit beta | 21,38 | -2,50 |
| SL0611 | <i>citD1</i> | Citrate lyase acyl carrier protein 1 | 22,22 | -2,36 |
| SL0612 | <i>citC</i> | [Citrate [pro-3S]-lyase] ligase | 8,29 | -2,47 |
| SL0613 | <i>dpiB</i> | Sensor histidine kinase DpiB | -1,36 | -3,56 |
| SL0616 | <i>crcA</i> | Protein crcA | -4,69 | -6,65 |
| SL0617 | <i>cspE</i> | Cold shock-like protein cspE | -3,51 | -2,78 |
| SL0632 | <i>cobD</i> | Threonine-phosphate decarboxylase | 3,16 | 1,02 |
| SL0637 | <i>uxaA</i> | SAF Domain-Containing Protein | -9,19 | -7,34 |
| SL0638 | <i>uxaA</i> | Altronate hydrolase | -8,11 | -5,57 |
| SL0639 | <i>kdgT2</i> | 2-keto-3-deoxygluconate permease 2 | -3,33 | -2,50 |
| SL0641 | <i>ybeL</i> | Uncharacterized protein ybeL | 2,12 | 4,14 |
| SL0651 | <i>gltL</i> | Glutamate/aspartate transport ATP-binding protein gltL | 3,26 | 8,59 |
| SL0652 | <i>gltK</i> | Glutamate/aspartate transport system permease protein gltK | 2,42 | 8,36 |
| SL0653 | <i>gltJ</i> | Glutamate/aspartate transport system permease protein gltJ | 1,58 | 5,50 |
| SL0654 | <i>gltI</i> | Glutamate/aspartate periplasmic-binding protein | 1,58 | 6,78 |
| SL0669 | <i>ybfM</i> | Uncharacterized protein ybfM | 3,25 | 2,74 |
| SL0670 | <i>ybfN</i> | Uncharacterized lipoprotein ybfN | 3,37 | 3,34 |
| SL0672 | <i>citB</i> | Citrate utilization protein B | 1,07 | 3,82 |
| SL0675 | <i>fur</i> | Ferric uptake regulation protein | -3,29 | -2,81 |
| SL0681 | - | 5-Nitroimidazole Antibiotic Resistance Protein | -1,24 | -5,70 |
| SL0682 | <i>potE</i> | Putrescine-ornithine antiporter | -1,11 | -4,57 |
| SL0683 | <i>speF</i> | Ornithine decarboxylase, inducible | 1,21 | -4,29 |
| SL0691 | <i>dtpD</i> | Dipeptide permease D | -4,97 | -2,14 |
| SL0713 | - | Hypothetical | 2,02 | 3,77 |
| SL0714 | <i>sdhC</i> | Succinate dehydrogenase cytochrome b556 subunit | 5,16 | 8,34 |
| SL0715 | <i>sdhD</i> | Succinate dehydrogenase hydrophobic membrane anchor subunit | 3,84 | 6,00 |
| SL0716 | <i>sdhA</i> | Succinate dehydrogenase flavoprotein subunit | 4,37 | 8,19 |
| SL0717 | <i>sdhB</i> | Succinate dehydrogenase iron-sulfur subunit | 4,79 | 8,63 |
| SL0720 | <i>sucC</i> | Succinyl-CoA ligase [ADP-forming] subunit beta | 1,40 | 3,54 |
| SL0733 | <i>nadA</i> | Quinolinate synthase A | -4,30 | -1,61 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|--------------|---|--------------------------|------------------------------|
| SL0740 | <i>ywbl</i> | Uncharacterized HTH-type transcriptional regulator <i>ywbl</i> | 3,78 | 3,02 |
| SL0764 | <i>hutI</i> | Imidazolonepropionase | 1,31 | 3,21 |
| SL0765 | <i>hutG</i> | Formimidoylglutamase | 1,66 | 4,38 |
| SL0767 | <i>hutU</i> | Urocanate hydratase | 23,77 | 21,16 |
| SL0768 | <i>hutH</i> | Histidine ammonia-lyase | 16,86 | 18,07 |
| SL0776 | <i>slrP</i> | E3 ubiquitin-protein ligase <i>slrP</i> | -5,25 | -6,12 |
| SL0790 | <i>ybhQ</i> | Inner membrane protein <i>ybhQ</i> | 4,45 | 1,17 |
| SL0796 | <i>rhlE</i> | ATP-dependent RNA helicase <i>rhlE</i> | -1,21 | -4,28 |
| SL0799 | <i>ybiJ</i> | Uncharacterized protein <i>ybiJ</i> | -5,03 | -3,65 |
| SL0805 | <i>glnH</i> | Glutamine-binding periplasmic protein | 1,24 | 3,68 |
| SL0813 | <i>ybiT</i> | Uncharacterized ABC transporter ATP-binding protein <i>ybiT</i> | -3,51 | -2,82 |
| SL0825 | <i>gsiB</i> | Glutathione-binding protein <i>gsiB</i> | 1,50 | 3,72 |
| SL0835 | <i>cysL</i> | HTH-type transcriptional regulator <i>cysL</i> | -6,20 | -5,57 |
| SL0836 | <i>yxjC</i> | Uncharacterized transporter <i>yxjC</i> | -3,76 | -2,37 |
| SL0841 | <i>ybjG</i> | Putative undecaprenyl-diphosphatase <i>ybjG</i> | -3,26 | -2,77 |
| SL0846 | <i>ybjL</i> | Putative transport protein <i>ybjL</i> | -3,92 | -2,78 |
| SL0854 | <i>potF</i> | Putrescine-binding periplasmic protein | -1,24 | 3,91 |
| SL0879 | <i>ybjX</i> | Uncharacterized protein <i>ybjX</i> | -3,90 | -5,97 |
| SL0880 | <i>macA</i> | Macrolide-specific efflux protein <i>macA</i> | -4,80 | -2,43 |
| SL0881 | <i>macB</i> | Macrolide export ATP-binding/permease protein <i>macB</i> | -3,32 | -1,49 |
| SL0883 | <i>clpS</i> | ATP-dependent Clp protease adapter protein <i>clpS</i> | -4,94 | -3,50 |
| SL0909 | <i>sopD2</i> | Secreted effector protein <i>sopD2</i> | -5,55 | -3,81 |
| SL0911 | <i>focA</i> | Probable formate transporter 1 | -3,08 | -7,51 |
| SL0936 | <i>ompF</i> | Outer membrane protein F | 3,64 | 7,42 |
| SL0937 | <i>asnS</i> | Asparaginyl-tRNA synthetase | -3,14 | -1,25 |
| SL0939 | <i>dpaL</i> | Diaminopropionate ammonia-lyase | 2,68 | 3,64 |
| SL0940 | <i>yflA</i> | Uncharacterized transporter <i>yflA</i> | 1,65 | 3,99 |
| SL0966 | <i>arrD</i> | Probable lysozyme from lambdoid prophage DLP12 | 1,02 | -3,53 |
| SL0967 | <i>rzpD</i> | Putative Rz endopeptidase from lambdoid prophage DLP12 | -1,16 | -4,10 |
| SL0968 | - | Hypothetical | -1,48 | -3,14 |
| SL0989 | <i>ycdD</i> | Tail fiber assembly protein homolog from lambdoid prophage Fels-1 | -1,34 | -3,53 |
| SL0990 | - | Hypothetical | -1,53 | -6,38 |
| SL0994 | - | Hypothetical | -2,56 | -3,96 |
| SL0995 | - | Prophage Encoded Virulence Factor | -3,35 | -1,84 |
| SL0996 | <i>msgA</i> | Virulence protein <i>msgA</i> | -2,83 | -5,56 |
| SL0999 | <i>ycbW</i> | Uncharacterized protein <i>ycbW</i> | -1,73 | -3,12 |
| SL1012 | <i>sxy</i> | Protein <i>sxy</i> | 4,04 | 3,23 |
| SL1020 | <i>rmlI</i> | Ribosomal RNA large subunit methyltransferase I | 3,16 | -1,01 |
| SL1026 | - | Hypothetical | -2,23 | -3,52 |
| SL1027 | <i>pipB</i> | Secreted effector protein <i>pipB</i> | -6,51 | -16,02 |
| SL1028 | - | Inner Membrane Protein | -12,86 | -47,98 |
| SL1029 | <i>sigE</i> | Chaperone protein <i>sigE</i> | -6,14 | -8,91 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|--------------|---|--------------------------|------------------------------|
| SL1030 | <i>sopB</i> | Inositol phosphate phosphatase sopB | -7,58 | -10,63 |
| SL1031 | - | Hypothetical | 9,42 | -1,75 |
| SL1032 | - | Hypothetical | 7,87 | -1,49 |
| SL1040 | <i>hpaG</i> | 4-hydroxyphenylacetate degradation bifunctional isomerase/decarboxylase | 2,59 | 7,56 |
| SL1041 | <i>hpcC</i> | 5-carboxymethyl-2-hydroxymuconate semialdehyde dehydrogenase | 2,98 | 7,23 |
| SL1042 | <i>hpcB</i> | 3,4-dihydroxyphenylacetate 2,3-dioxygenase | 2,43 | 6,00 |
| SL1043 | <i>hpcD</i> | 5-carboxymethyl-2-hydroxymuconate Delta-isomerase | 2,36 | 5,31 |
| SL1044 | <i>hpcG</i> | 2-oxo-hepta-3-ene-1,7-dioic acid hydratase | 1,38 | 3,18 |
| SL1045 | <i>hpcH</i> | 4-hydroxy-2-oxo-heptane-1,7-dioate aldolase | 1,31 | 3,02 |
| SL1046 | <i>ttuB</i> | Putative tartrate transporter | 1,35 | 3,69 |
| SL1056 | <i>agp</i> | Glucose-1-phosphatase | 3,19 | 3,03 |
| SL1061 | - | Uncharacterized protein R02472 | 3,52 | 9,50 |
| SL1062 | <i>putA</i> | Bifunctional protein putA | 14,32 | 77,71 |
| SL1063 | <i>putP</i> | Sodium/proline symporter | 3,39 | 12,16 |
| SL1066 | <i>sglT</i> | Sodium/glucose cotransporter | -1,01 | 6,36 |
| SL1067 | <i>nanE1</i> | Putative N-acetylmannosamine-6-phosphate 2-epimerase 1 | 2,40 | 4,53 |
| SL1068 | <i>nanM</i> | N-acetylneuraminate epimerase | 1,16 | 4,04 |
| SL1069 | <i>yiiY</i> | Uncharacterized protein yiiY | 1,10 | 5,40 |
| SL1077 | <i>csgF</i> | Curli production assembly/transport component csgF | -3,23 | 2,00 |
| SL1083 | <i>ymdA</i> | Uncharacterized protein ymdA | 1,64 | 3,20 |
| SL1089 | <i>yceK</i> | Uncharacterized protein yceK | 4,06 | 2,17 |
| SL1090 | <i>msyB</i> | Acidic protein msyB | 5,67 | 2,50 |
| SL1105 | <i>yceH</i> | UPF0502 protein yceH | 2,06 | 3,95 |
| SL1110 | <i>flgA</i> | Flagella basal body P-ring formation protein flgA | 4,05 | 3,45 |
| SL1124 | <i>yiaF</i> | Uncharacterized protein yiaF | 6,82 | -1,14 |
| SL1129 | <i>plsX</i> | Phosphate acyltransferase | -1,60 | -4,72 |
| SL1151 | <i>bhsA</i> | Multiple stress resistance protein BhsA | -3,31 | -2,12 |
| SL1161 | <i>sifA</i> | Secreted effector protein sifA | -2,70 | -3,57 |
| SL1176 | <i>icd</i> | Isocitrate dehydrogenase [NADP] | 1,65 | 3,29 |
| SL1177 | - | Bacteriophage Protein | -16,74 | -25,20 |
| SL1178 | - | Hypothetical Protein SL1178 | -6,61 | -7,87 |
| SL1181 | <i>envE</i> | Probable lipoprotein envE | -4,06 | -3,82 |
| SL1182 | <i>cspH</i> | Cold shock-like protein cspH | -1,12 | -3,33 |
| SL1183 | <i>pagD</i> | Virulence protein pagD | -10,07 | -6,00 |
| SL1184 | <i>pagC</i> | Virulence membrane protein pagC | -15,69 | -11,99 |
| SL1186 | - | Hypothetical | -4,93 | -4,22 |
| SL1191 | <i>xp55</i> | Protein XP55 | 4,29 | 3,96 |
| SL1192 | <i>dppB</i> | Putative peptide transport system permease protein BMEII0209 | 3,41 | 2,88 |
| SL1204 | <i>aroQ</i> | Monofunctional chorismate mutase | -1,13 | -3,35 |
| SL1218 | <i>yeaJ</i> | Putative diguanylate cyclase YeaJ | -2,57 | -3,03 |
| SL1227 | <i>yeaC</i> | Uncharacterized protein yeaC | 1,72 | 3,00 |
| SL1238 | <i>astC</i> | Succinylornithine transaminase | 12,92 | 43,62 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|-------------|---|--------------------------|------------------------------|
| SL1239 | <i>astA</i> | Arginine N-succinyltransferase | 10,81 | 26,67 |
| SL1240 | <i>astD</i> | N-succinylglutamate 5-semialdehyde dehydrogenase | 7,93 | 23,23 |
| SL1241 | <i>astB</i> | N-succinylarginine dihydrolase | 4,94 | 14,27 |
| SL1242 | <i>astE</i> | Succinylglutamate desuccinylase | 3,04 | 8,31 |
| SL1250 | <i>chbR</i> | HTH-type transcriptional regulator chbR | -5,19 | -1,16 |
| SL1251 | <i>chbF</i> | 6-phospho-beta-glucosidase | -2,98 | 1,23 |
| SL1255 | <i>ydjN</i> | Uncharacterized symporter ydjN | 1,84 | 3,28 |
| SL1259 | <i>yniA</i> | Uncharacterized protein yniA | 2,01 | 3,45 |
| SL1262 | <i>ydiY</i> | Uncharacterized protein ydiY | -1,20 | -3,05 |
| SL1263 | - | Hypothetical | -8,24 | -12,64 |
| SL1264 | - | DNA/RNA Non-Specific Endonuclease | -5,85 | -7,63 |
| SL1265 | <i>nucA</i> | Nuclease | -14,89 | -13,64 |
| SL1278 | <i>cdgR</i> | Cyclic di-GMP regulator cdgR | -5,00 | -2,05 |
| SL1283 | <i>ppsA</i> | Phosphoenolpyruvate synthase | -1,07 | 4,30 |
| SL1291 | <i>ydiF</i> | Uncharacterized protein ydiF | 1,13 | 4,23 |
| SL1302 | <i>ydjN</i> | Uncharacterized symporter ydjN | 8,97 | 6,96 |
| SL1303 | <i>sufA</i> | Protein sufA | 1,12 | 4,08 |
| SL1313 | <i>puuP</i> | Putrescine importer | 2,88 | 4,25 |
| SL1314 | <i>pip</i> | Proline iminopeptidase | 2,83 | 4,08 |
| SL1315 | - | Hypothetical | 2,91 | 3,97 |
| SL1316 | <i>rbsK</i> | Ribokinase | 8,36 | 8,68 |
| SL1318 | - | Tetrathionate Reductase Subunit C | -1,45 | -2,98 |
| SL1325 | <i>nreC</i> | Oxygen regulatory protein nreC | -3,72 | -2,58 |
| SL1326 | <i>rcsC</i> | Sensor kinase protein rcsC | -5,34 | -2,56 |
| SL1327 | <i>spiC</i> | Salmonella pathogenicity island protein C | -9,52 | -7,03 |
| SL1328 | <i>yscC</i> | Yop proteins translocation protein C | -7,91 | -6,06 |
| SL1329 | - | Type-III Secretion Protein | -8,23 | -7,92 |
| SL1330 | - | Secretion System Protein | -7,09 | -4,88 |
| SL1331 | <i>sseA</i> | Type III secretion system chaperone sseA | -4,87 | -3,08 |
| SL1332 | <i>sseB</i> | Secreted effector protein sseB | -3,85 | -2,69 |
| SL1333 | - | Type III Secretion Low Calcium Response Chaperone LcrH/SycD | -3,32 | -2,44 |
| SL1337 | - | Type III Secretion Chaperone | -3,87 | -1,55 |
| SL1341 | - | Hypothetical | -14,03 | -18,14 |
| SL1342 | - | Type III Secretion System Apparatus Protein | -15,77 | -22,27 |
| SL1343 | <i>ssaJ</i> | Secretion system apparatus lipoprotein ssaJ | -15,33 | -17,00 |
| SL1344 | - | Type III Secretion Apparatus | -11,84 | -16,48 |
| SL1345 | <i>ssaK</i> | Secretion system apparatus protein ssaK | -9,59 | -11,64 |
| SL1346 | <i>ssaL</i> | Secretion system apparatus protein ssaL | -8,72 | -5,60 |
| SL1347 | <i>ssaM</i> | Secretion system apparatus protein ssaM | -12,72 | -5,75 |
| SL1348 | <i>ssaV</i> | Secretion system apparatus protein ssaV | -3,70 | -1,41 |
| SL1353 | <i>yscR</i> | Virulence protein yscR | -3,66 | -4,01 |
| SL1354 | <i>ssaS</i> | Secretion system apparatus protein SsaS | -6,29 | -6,62 |
| SL1355 | <i>ssaT</i> | Secretion system apparatus protein ssaT | -4,26 | -4,28 |
| SL1360 | <i>ydhC</i> | Inner membrane transport protein ydhC | -8,66 | -24,59 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|--------------|--|--------------------------|------------------------------|
| SL1371 | <i>ydhF</i> | Oxidoreductase <i>ydhF</i> | 3,41 | 1,92 |
| SL1398 | <i>fumA</i> | Fumarate hydratase class I, aerobic | 2,49 | 5,66 |
| SL1399 | - | Hypothetical Protein SL1399 | 2,13 | 7,56 |
| SL1400 | <i>fumC</i> | Fumarate hydratase class II | 1,45 | 4,75 |
| SL1401 | <i>tus</i> | DNA replication terminus site-binding protein | 1,34 | 3,56 |
| SL1405 | <i>rstA</i> | Transcriptional regulatory protein <i>rstA</i> | -1,68 | -3,50 |
| SL1422 | <i>opuCB</i> | Glycine betaine/carnitine/choline transport system permease protein <i>opuCB</i> | 2,33 | 3,34 |
| SL1423 | <i>opuCC</i> | Glycine betaine/carnitine/choline-binding protein | 2,35 | 4,59 |
| SL1424 | <i>opuCB</i> | Glycine betaine/carnitine/choline transport system permease protein <i>opuCB</i> | 2,03 | 3,48 |
| SL1434 | <i>ynfA</i> | UPF0060 membrane protein <i>ynfA</i> | 3,16 | -1,97 |
| SL1435 | <i>rspA</i> | Starvation-sensing protein <i>rspA</i> | 5,16 | 7,90 |
| SL1436 | <i>rspB</i> | Starvation-sensing protein <i>rspB</i> | 4,95 | 8,06 |
| SL1437 | <i>ydfJ</i> | Putative inner membrane metabolite transport protein <i>ydfJ</i> | 1,70 | 4,11 |
| SL1439 | <i>ydfZ</i> | Putative selenoprotein <i>ydfZ</i> | 6,74 | 1,39 |
| SL1444 | <i>ydeJ</i> | Protein <i>ydeJ</i> | -3,51 | -1,03 |
| SL1452 | <i>sotB</i> | Probable sugar efflux transporter | -7,72 | -3,01 |
| SL1467 | <i>hupB</i> | Uptake hydrogenase large subunit | 1,16 | 3,66 |
| SL1472 | <i>exuT</i> | Hexuronate transporter | 1,38 | 3,48 |
| SL1473 | - | Hypothetical | -1,35 | -3,72 |
| SL1475 | <i>yhjG</i> | Uncharacterized aromatic compound monooxygenase <i>yhjG</i> | 2,79 | 3,46 |
| SL1489 | <i>treY</i> | Maltooligosyl trehalose synthase | 2,33 | 3,14 |
| SL1492 | <i>hdeB</i> | Protein <i>hdeB</i> | 3,96 | -1,20 |
| SL1494 | <i>bdm</i> | Protein <i>bdm</i> homolog | -4,75 | -4,02 |
| SL1498 | <i>fdnI</i> | Formate dehydrogenase, nitrate-inducible, cytochrome b556(fdn) subunit | 3,85 | -1,34 |
| SL1499 | <i>fdnH</i> | Formate dehydrogenase, nitrate-inducible, iron-sulfur subunit | 3,50 | -1,09 |
| SL1500 | <i>fdnG</i> | Formate dehydrogenase, nitrate-inducible, major subunit | 3,60 | -1,19 |
| SL1501 | <i>fdnG</i> | Formate dehydrogenase, nitrate-inducible, major subunit | 4,12 | 1,12 |
| SL1505 | <i>smvA</i> | Methyl viologen resistance protein <i>smvA</i> | -3,14 | -2,99 |
| SL1507 | <i>narU</i> | Nitrite extrusion protein 2 | 1,61 | 11,11 |
| SL1508 | <i>narZ</i> | Respiratory nitrate reductase 2 alpha chain | 3,12 | 6,46 |
| SL1509 | <i>narY</i> | Respiratory nitrate reductase 2 beta chain | 3,24 | 5,04 |
| SL1510 | <i>narW</i> | Probable nitrate reductase molybdenum cofactor assembly chaperone NarW | 3,00 | 4,15 |
| SL1511 | <i>narV</i> | Respiratory nitrate reductase 2 gamma chain | 2,99 | 4,38 |
| SL1525 | - | Virulence Protein SrfB | 1,72 | 4,34 |
| SL1531 | - | D-Alanyl-D-Alanine Dipeptidase | -9,15 | -4,95 |
| SL1532 | <i>sifB</i> | Secreted effector protein <i>sifB</i> | -3,52 | -3,28 |
| SL1553 | <i>pnbA</i> | Para-nitrobenzyl esterase | 4,58 | 3,07 |
| SL1554 | <i>ydcJ</i> | Uncharacterized protein <i>ydcJ</i> | 15,31 | 9,60 |
| SL1559 | <i>steB</i> | Secreted effector protein <i>steB</i> | -30,72 | -16,75 |
| SL1561 | <i>sseJ</i> | Secreted effector protein <i>sseJ</i> | -4,11 | -2,52 |
| SL1578 | <i>hslJ</i> | Heat shock protein <i>hslJ</i> | -3,39 | -2,04 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|--------------|---|--------------------------|------------------------------|
| SL1596 | - | Hypothetical | 5,27 | -1,06 |
| SL1602 | - | Hypothetical | -10,61 | -4,92 |
| SL1619 | <i>pspB</i> | Phage shock protein B | -3,81 | -2,10 |
| SL1620 | <i>pspA</i> | Phage shock protein A | -3,48 | -1,75 |
| SL1627 | <i>ydiV</i> | Uncharacterized protein ydiV | 3,11 | 1,44 |
| SL1637 | <i>osmB</i> | Osmotically-inducible lipoprotein B | -6,38 | -4,73 |
| SL1644 | <i>acnA</i> | Aconitate hydratase 1 | 1,65 | 3,38 |
| SL1649 | <i>yciK</i> | Uncharacterized oxidoreductase yciK | 4,55 | 2,60 |
| SL1650 | <i>btuR</i> | Cop(I)lyrinic acid a,c-diamine adenosyltransferase | 4,35 | 2,90 |
| SL1659 | <i>ymdF</i> | Uncharacterized protein ymdF | -1,52 | -3,54 |
| SL1660 | <i>yciF</i> | Protein yciF | -1,84 | -3,65 |
| SL1661 | <i>yciE</i> | Protein yciE | -1,98 | -3,21 |
| SL1677 | <i>oppA</i> | Periplasmic oligopeptide-binding protein | 1,43 | 3,54 |
| SL1679 | <i>ychE</i> | UPF0056 membrane protein yhcE | 1,13 | -3,72 |
| SL1689 | <i>narL</i> | Respiratory nitrate reductase 1 gamma chain | 9,45 | 2,45 |
| SL1690 | <i>narJ</i> | Nitrate reductase molybdenum cofactor assembly chaperone NarJ | 9,45 | 2,43 |
| SL1691 | <i>narH</i> | Respiratory nitrate reductase 1 beta chain | 7,87 | 2,12 |
| SL1692 | <i>narG</i> | Respiratory nitrate reductase 1 alpha chain | 5,16 | 2,24 |
| SL1693 | <i>narK</i> | Nitrite extrusion protein 1 | 32,48 | 1,66 |
| SL1710 | <i>ychH</i> | Uncharacterized protein ychH | 2,43 | 3,18 |
| SL1723 | <i>gdhA</i> | Glutamate dehydrogenase | 6,36 | 17,53 |
| SL1726 | <i>ycgR</i> | Flagellar brake protein YcgR | -2,06 | -5,01 |
| SL1729 | <i>cvrA</i> | Cell volume regulation protein A | -3,26 | -2,77 |
| SL1730 | <i>dadX</i> | Alanine racemase, catabolic | 1,36 | 6,94 |
| SL1731 | <i>dadA</i> | D-amino acid dehydrogenase small subunit | 1,82 | 9,25 |
| SL1737 | <i>gns</i> | Protein gns | 3,14 | 2,78 |
| SL1739 | <i>ycgN</i> | UPF0260 protein CKO_01185 | 3,15 | -1,74 |
| SL1742 | <i>minC</i> | Probable septum site-determining protein minC | -1,72 | -4,10 |
| SL1762 | <i>yobD</i> | UPF0266 membrane protein yobD | -1,41 | -5,91 |
| SL1768 | <i>yebO</i> | Uncharacterized protein yebO | -2,49 | -3,12 |
| SL1769 | <i>mgrB</i> | Protein mgrB | -2,85 | -3,11 |
| SL1770 | <i>yobH</i> | Uncharacterized protein yobH | -3,58 | -2,58 |
| SL1772 | <i>yebQ</i> | Uncharacterized transporter yebQ | -3,40 | -1,64 |
| SL1780 | <i>yebV</i> | Uncharacterized protein yebV | -5,37 | -2,02 |
| SL1782 | <i>pphA</i> | Serine/threonine-protein phosphatase 1 | -2,73 | -4,92 |
| SL1783 | - | Hypothetical | -3,53 | -8,58 |
| SL1784 | <i>sopE2</i> | Guanine nucleotide exchange factor sopE2 | -5,12 | -16,49 |
| SL1785 | <i>ycgX</i> | Uncharacterized protein ycgX | -4,00 | -6,12 |
| SL1793 | <i>pagO</i> | Protein pagO | -4,98 | -5,37 |
| SL1794 | - | Hypothetical | -8,02 | -7,65 |
| SL1795 | - | Hypothetical | -6,18 | -5,78 |
| SL1798 | <i>insF1</i> | Hypothetical Protein insF1 | -3,08 | -1,34 |
| SL1799 | - | PagK-Like Protein | -4,51 | -4,28 |
| SL1804 | - | Hypothetical | 1,20 | -3,58 |
| SL1810 | <i>holE</i> | DNA polymerase III subunit theta | 4,58 | -1,04 |
| SL1819 | <i>edd</i> | Phosphogluconate dehydratase | -2,54 | -5,50 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|-------------|---|--------------------------|------------------------------|
| SL1844 | <i>argS</i> | Arginyl-tRNA synthetase | 1,29 | -3,31 |
| SL1852 | <i>cheB</i> | Chemotaxis response regulator protein-glutamate methyltransferase | -1,80 | -3,86 |
| SL1853 | <i>cheR</i> | Chemotaxis protein methyltransferase | -2,09 | -3,83 |
| SL1857 | <i>motB</i> | Motility protein B | -1,45 | -2,99 |
| SL1858 | <i>motA</i> | Motility protein A | -1,72 | -3,31 |
| SL1859 | <i>flhC</i> | Flagellar transcriptional activator flhC | -1,47 | -3,09 |
| SL1860 | <i>flhD</i> | Transcriptional activator FlhD | -1,05 | -3,17 |
| SL1861 | <i>uspC</i> | Universal stress protein C | 3,43 | 1,74 |
| SL1865 | <i>ftnB</i> | Ferritin-like protein 2 | 2,31 | 3,10 |
| SL1872 | - | Hypothetical | -4,34 | -4,52 |
| SL1874 | - | Hypothetical | -2,98 | -4,78 |
| SL1878 | <i>yecF</i> | Uncharacterized protein yecF | -3,51 | -8,87 |
| SL1879 | <i>sdiA</i> | Regulatory protein sdiA | -1,66 | -3,85 |
| SL1890 | <i>fliS</i> | Flagellar protein fliS | 1,03 | -3,14 |
| SL1891 | <i>fliT</i> | Flagellar protein fliT | 1,06 | -3,00 |
| SL1894 | <i>yedE</i> | UPF0394 inner membrane protein yedE | 17,08 | 3,86 |
| SL1895 | <i>yedF</i> | UPF0033 protein yedF | 17,78 | 3,15 |
| SL1896 | - | Hypothetical A | -2,08 | -3,36 |
| SL1911 | <i>rcsA</i> | Colanic acid capsular biosynthesis activation protein A | -3,43 | -2,52 |
| SL1922 | <i>yedR</i> | Inner membrane protein yedR | -6,03 | -4,09 |
| SL1928 | - | Cytoplasmic Protein | -3,87 | -7,81 |
| SL1950 | <i>ymfN</i> | Uncharacterized protein ymfN | 1,02 | -3,34 |
| SL1951 | - | P27 Family Phage Terminase Small Subunit | 1,03 | -3,72 |
| SL1952 | - | Hypothetical | 1,25 | -3,08 |
| SL1955 | <i>rzpD</i> | Putative Rz endopeptidase from lambdoid prophage DLP12 | 1,03 | -3,37 |
| SL1956 | - | Uncharacterized protein HI_1415 | 1,24 | -3,36 |
| SL1957 | - | Phage Holin Lambda Family | 1,15 | -3,53 |
| SL1968 | <i>yfdP</i> | Uncharacterized protein yfdP | 1,90 | 2,99 |
| SL1969 | <i>yfdQ</i> | Uncharacterized protein yfdQ | 1,90 | 3,27 |
| SL2007 | <i>cbiE</i> | Probable cobalt-precorrin-6Y C(5)-methyltransferase | -1,97 | -3,51 |
| SL2010 | <i>cbiB</i> | Cobalamin biosynthesis protein cbiB | -1,69 | -3,16 |
| SL2013 | <i>pduF</i> | Propanediol diffusion facilitator | -1,60 | -3,03 |
| SL2014 | <i>pduA</i> | Propanediol utilization protein pduA | -1,26 | -22,81 |
| SL2015 | <i>pduB</i> | Propanediol utilization protein pduB | -1,93 | -40,16 |
| SL2016 | <i>pduC</i> | Propanediol dehydratase large subunit | -2,41 | -24,41 |
| SL2017 | <i>pduD</i> | Propanediol dehydratase medium subunit | -4,45 | -38,60 |
| SL2018 | <i>pduE</i> | Propanediol dehydratase small subunit | -6,69 | -66,46 |
| SL2019 | - | Glycerol Dehydratase Reactivation Factor Large Subunit | -8,05 | -53,01 |
| SL2020 | - | Hypothetical | -12,58 | -77,87 |
| SL2021 | <i>pduA</i> | Propanediol utilization protein pduA | -11,89 | -20,95 |
| SL2022 | - | Propanediol Utilization Protein PduK | -12,06 | -18,88 |
| SL2023 | - | Propanediol Utilization Protein | -14,23 | -25,45 |
| SL2024 | - | Propanediol Utilization Protein | -13,88 | -26,37 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|-------------|--|--------------------------|------------------------------|
| SL2025 | <i>ccmL</i> | Carbon dioxide concentrating mechanism protein ccmL | -11,06 | -20,64 |
| SL2026 | - | Cob(I)yrinic acid a,c-diamide adenosyltransferase | -10,59 | -21,04 |
| SL2027 | <i>eutE</i> | Ethanolamine utilization protein eutE | -4,51 | -8,20 |
| SL2028 | <i>adh1</i> | NADPH-dependent butanol dehydrogenase | -4,82 | -9,36 |
| SL2029 | <i>rnfC</i> | Electron transport complex protein rnfC | -2,90 | -4,59 |
| SL2030 | <i>eutM</i> | Microcompartments Protein | -2,19 | -3,61 |
| SL2031 | <i>pduU</i> | Propanediol utilization protein pduU | -2,04 | -4,09 |
| SL2032 | <i>pduV</i> | Propanediol utilization protein pduV | -2,07 | -3,98 |
| SL2033 | <i>pduW</i> | Probable propionate kinase | -1,80 | -3,31 |
| SL2037 | <i>gyrl</i> | DNA gyrase inhibitory protein homolog | 2,61 | 4,09 |
| SL2038 | <i>dacD</i> | D-alanyl-D-alanine carboxypeptidase dacD | -1,60 | -3,59 |
| SL2043 | <i>sopA</i> | E3 ubiquitin-protein ligase SopA | -16,06 | -11,05 |
| SL2049 | <i>hisD</i> | Histidinol dehydrogenase | -1,50 | 3,14 |
| SL2050 | <i>hisC</i> | Histidinol-phosphate aminotransferase | -1,08 | 3,41 |
| SL2056 | <i>wzzB</i> | Chain length determinant protein | -2,36 | -6,76 |
| SL2057 | <i>udg</i> | UDP-glucose 6-dehydrogenase | -8,32 | -6,30 |
| SL2077 | <i>wcaL</i> | Putative colanic acid biosynthesis glycosyltransferase wcaL | 1,78 | 3,22 |
| SL2087 | <i>wcaF</i> | Putative colanic acid biosynthesis acetyltransferase wcaF | -3,34 | -1,57 |
| SL2115 | - | Hypothetical | -5,31 | -2,96 |
| SL2119 | <i>yegT</i> | Putative nucleoside transporter yegT | 2,44 | 4,25 |
| SL2130 | <i>yehE</i> | Uncharacterized protein yehE | -31,09 | -15,13 |
| SL2136 | <i>yehT</i> | Uncharacterized response regulatory protein yehT | 21,86 | 3,14 |
| SL2137 | <i>yehU</i> | Inner membrane protein yehU | 10,40 | 1,50 |
| SL2153 | <i>maiA</i> | Probable maleylacetate isomerase | 1,79 | 3,04 |
| SL2154 | <i>ycgM</i> | Uncharacterized protein PYRAB13970 | 2,31 | 3,97 |
| SL2155 | - | Gentisate 1,2-Dioxygenase | 2,58 | 5,13 |
| SL2158 | <i>yohJ</i> | UPF0299 membrane protein CKO_00648 | -9,78 | -11,34 |
| SL2159 | <i>yohK</i> | Inner membrane protein yohK | -13,53 | -12,19 |
| SL2160 | <i>cdd</i> | Cytidine deaminase | -10,57 | -8,24 |
| SL2165 | <i>mglC</i> | Galactoside transport system permease protein mglC | 2,33 | 6,61 |
| SL2166 | <i>mglA</i> | Galactose/methyl galactoside import ATP-binding protein MglA | 2,14 | 11,23 |
| SL2167 | <i>mglB</i> | D-galactose-binding periplasmic protein | 3,67 | 10,18 |
| SL2168 | <i>galS</i> | HTH-type transcriptional regulator galS | 4,52 | 1,68 |
| SL2169 | <i>yeiB</i> | Uncharacterized protein yeiB | -6,56 | -4,93 |
| SL2170 | <i>folE</i> | GTP cyclohydrolase 1 | -5,82 | -3,82 |
| SL2181 | <i>fruA</i> | PTS system fructose-specific EIIBC component | -2,54 | -10,61 |
| SL2182 | <i>fruK</i> | 1-phosphofructokinase | -2,52 | -8,46 |
| SL2183 | <i>fruB</i> | Multiphosphoryl transfer protein | -2,11 | -6,16 |
| SL2184 | <i>setB</i> | Sugar efflux transporter B | -1,31 | -5,41 |
| SL2188 | <i>yeiP</i> | Elongation factor P-like protein | 4,21 | -1,18 |
| SL2191 | <i>spr</i> | Lipoprotein spr | -1,01 | -3,81 |
| SL2214 | <i>pifA</i> | KAP P-Loop Domain-Containing Protein | 8,00 | 2,07 |
| SL2225 | <i>napC</i> | Cytochrome c-type protein napC | 6,57 | 2,49 |
| SL2226 | <i>napB</i> | Diheme cytochrome c napB | 3,46 | 1,77 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|-------------|--|--------------------------|------------------------------|
| SL2227 | <i>napH</i> | Ferredoxin-type protein napH | 6,95 | 2,21 |
| SL2228 | <i>napG</i> | Ferredoxin-type protein napG | 8,39 | 2,65 |
| SL2229 | <i>napA</i> | Periplasmic nitrate reductase | 8,88 | 3,48 |
| SL2230 | <i>napD</i> | Protein napD | 5,81 | -1,16 |
| SL2231 | <i>napF</i> | Ferredoxin-type protein napF | 4,56 | 1,09 |
| SL2243 | <i>ttuB</i> | Putative tartrate transporter | 1,01 | 3,31 |
| SL2251 | <i>glpQ</i> | Glycerophosphoryl diester phosphodiesterase | 3,61 | -1,04 |
| SL2256 | <i>sseL</i> | Deubiquitinase sseL | -2,80 | -9,57 |
| SL2265 | <i>ais</i> | Lipopolysaccharide core heptose(II)-phosphate phosphatase | -1,91 | -4,74 |
| SL2266 | <i>arnB</i> | UDP-4-amino-4-deoxy-L-arabinose--oxoglutarate aminotransferase | -3,45 | -2,44 |
| SL2267 | <i>arnC</i> | Undecaprenyl-phosphate 4-deoxy-4-formamido-L-arabinose transferase | -3,30 | -2,05 |
| SL2283 | <i>cheV</i> | Chemotaxis protein cheV | -1,51 | -10,75 |
| SL2299 | <i>lrhA</i> | Probable HTH-type transcriptional regulator lrhA | -4,14 | -2,65 |
| SL2306 | <i>ackA</i> | Acetate kinase | -2,28 | -3,07 |
| SL2313 | <i>ulaC</i> | Ascorbate-specific phosphotransferase enzyme IIA component | 2,57 | 3,39 |
| SL2324 | <i>argT</i> | Lysine-arginine-ornithine-binding periplasmic protein | 2,23 | 7,89 |
| SL2327 | - | Amino Acid Racemase | 3,25 | 2,86 |
| SL2357 | <i>fadJ</i> | Fatty acid oxidation complex subunit alpha | 1,43 | 4,65 |
| SL2360 | <i>fadL</i> | Long-chain fatty acid transport protein | 7,03 | 7,09 |
| SL2362 | <i>yfdC</i> | Inner membrane protein yfdC | -3,14 | 1,40 |
| SL2363 | <i>pgtE</i> | Outer membrane protease E | -3,07 | -2,42 |
| SL2369 | <i>ddg</i> | Protein ddg | -4,29 | -11,56 |
| SL2379 | <i>yfeC</i> | Uncharacterized protein yfeC | 5,24 | 1,46 |
| SL2380 | <i>yfeD</i> | Uncharacterized protein yfeD | 3,64 | 1,87 |
| SL2404 | <i>cysA</i> | Sulfate/thiosulfate import ATP-binding protein cysA | -1,07 | 12,67 |
| SL2405 | <i>cysW</i> | Sulfate transport system permease protein cysW | -1,26 | 6,01 |
| SL2406 | <i>cysU</i> | Sulfate transport system permease protein cysT | -1,10 | 8,74 |
| SL2407 | <i>cysP</i> | Thiosulfate-binding protein | 1,12 | 13,02 |
| SL2408 | <i>ucpA</i> | Oxidoreductase ucpA | -1,10 | 3,08 |
| SL2432 | <i>eutP</i> | Ethanolamine utilization protein eutP | 4,93 | 2,01 |
| SL2433 | <i>eutS</i> | Ethanolamine utilization protein eutS | 4,42 | 1,70 |
| SL2435 | <i>maeB</i> | NADP-dependent malic enzyme | 2,59 | 5,97 |
| SL2451 | <i>nlpB</i> | Lipoprotein 34 | -3,86 | -1,89 |
| SL2467 | - | Hypothetical | -1,21 | -3,33 |
| SL2468 | <i>yfgG</i> | Uncharacterized protein yfgG | -1,21 | -3,19 |
| SL2472 | <i>guaB</i> | Inosine-5'-monophosphate dehydrogenase | -1,30 | -3,20 |
| SL2481 | <i>engA</i> | GTP-binding protein engA | -3,03 | -1,82 |
| SL2488 | <i>ndk</i> | Nucleoside diphosphate kinase | 5,40 | 6,14 |
| SL2506 | <i>iscR</i> | HTH-type transcriptional regulator iscR | -2,77 | -3,23 |
| SL2510 | <i>asrA</i> | Anaerobic sulfite reductase subunit A | -1,62 | -3,47 |
| SL2511 | <i>asrB</i> | Anaerobic sulfite reductase subunit B | -1,82 | -3,42 |
| SL2515 | <i>csiE</i> | Stationary phase-inducible protein csiE | 6,04 | 6,85 |
| SL2518 | <i>hmp</i> | Flavohemoprotein | 2,80 | 5,21 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|-------------|---|--------------------------|------------------------------|
| SL2521 | <i>cadA</i> | Lysine decarboxylase, inducible | 1,93 | -4,98 |
| SL2522 | <i>yjdL</i> | Probable dipeptide and tripeptide permease YjdL | 2,24 | -6,76 |
| SL2532 | <i>ybbF</i> | Putative PTS system EIIBC component ybbF | 2,21 | 3,24 |
| SL2533 | <i>murQ</i> | N-acetylmuramic acid 6-phosphate etherase | 2,27 | 3,66 |
| SL2537 | <i>cynR</i> | HTH-type transcriptional regulator cynR | 1,64 | 3,05 |
| SL2548 | - | Hypothetical Protein SL2548 | -2,00 | -3,48 |
| SL2549 | - | PagK-Like Protein | -4,06 | -4,10 |
| SL2550 | <i>ycdD</i> | Tail fiber assembly protein homolog from lambdoid prophage Fels-1 | -1,49 | -4,98 |
| SL2551 | - | Appr-1-P Processing Domain-Containing Protein | -1,52 | -4,76 |
| SL2552 | <i>stfQ</i> | Side tail fiber protein homolog from lambdoid prophage Qin | -1,38 | -3,35 |
| SL2553 | - | Hocificity Protein J | -1,84 | -11,08 |
| SL2555 | - | NLP/P60 Protein | -1,38 | -3,95 |
| SL2559 | - | Minor Tail Protein | -1,70 | -4,83 |
| SL2560 | - | Minor Tail Component Of Putative Prophage | -1,50 | -5,25 |
| SL2564 | - | Phage Tail Component | -1,14 | -3,00 |
| SL2566 | - | DNA Packaging-Like Protein | -1,25 | -3,76 |
| SL2567 | - | P21 prophage-derived major head protein | -1,34 | -4,91 |
| SL2568 | - | Head Decoration Protein | -1,25 | -4,48 |
| SL2569 | <i>sppA</i> | Putative signal peptide peptidase sppA | -1,10 | -10,71 |
| SL2570 | - | Lambda Family Phage Portal Protein | 1,01 | -6,06 |
| SL2572 | <i>tfaD</i> | Putative tail fiber assembly protein homolog from lambdoid prophage DLP12 | 1,39 | -4,71 |
| SL2573 | <i>nohA</i> | P21 prophage-derived terminase small subunit | -1,00 | -8,60 |
| SL2575 | <i>rzpD</i> | Putative Rz endopeptidase from lambdoid prophage DLP12 | -1,01 | -5,68 |
| SL2576 | <i>arrD</i> | Probable lysozyme from lambdoid prophage DLP12 | 1,01 | -3,56 |
| SL2595 | - | Hypothetical | -3,18 | -1,90 |
| SL2609 | <i>eamB</i> | Cysteine/O-acetylserine efflux protein | -4,44 | -7,15 |
| SL2619 | - | Hypothetical | 4,28 | 1,51 |
| SL2673 | <i>pinE</i> | DNA-invertase from lambdoid prophage e14 | -3,29 | -3,80 |
| SL2674 | <i>sopE</i> | Guanine nucleotide exchange factor sopE | -4,85 | -27,69 |
| SL2696 | - | Hypothetical | 1,92 | 3,87 |
| SL2704 | - | Putative uncharacterized protein ORFC-like in prophage region | 1,29 | -3,46 |
| SL2710 | <i>yopC</i> | SPBc2 prophage-derived uncharacterized protein yopC | 2,67 | 3,11 |
| SL2719 | - | Hypothetical | 3,48 | 3,69 |
| SL2720 | - | Hypothetical | 3,25 | 3,04 |
| SL2722 | <i>traC</i> | DNA primase traC | 2,56 | 4,29 |
| SL2723 | <i>intA</i> | Prophage CP4-57 integrase | 5,32 | 6,56 |
| SL2724 | <i>intA</i> | Integrase | 2,89 | 3,40 |
| SL2728 | - | Cytoplasmic Protein | 3,68 | 1,38 |
| SL2743 | <i>sgrR</i> | HTH-type transcriptional regulator sgrR | 4,48 | 3,19 |
| SL2755 | <i>fliA</i> | Repressor of phase 1 flagellin gene | -1,47 | -15,85 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|--------------|--|--------------------------|------------------------------|
| SL2757 | NA | NA | 3,30 | -1,06 |
| SL2758 | - | Hypothetical | -1,34 | -5,31 |
| SL2763 | <i>pipB2</i> | Secreted effector protein pipB2 | -3,40 | -1,57 |
| SL2764 | <i>ybjX</i> | Uncharacterized protein ybjX | -5,61 | -4,33 |
| SL2765 | - | Hypothetical | -6,91 | -3,63 |
| SL2766 | - | Hypothetical | -3,68 | -2,82 |
| SL2768 | <i>qseC</i> | Sensor protein qseC | 3,07 | 7,27 |
| SL2769 | <i>tctD</i> | Transcriptional regulatory protein tctD | 3,86 | 13,84 |
| SL2770 | <i>yflP</i> | UPF0065 protein yflP | 34,16 | 3,01 |
| SL2771 | - | Hypothetical | 42,49 | 4,00 |
| SL2772 | - | Uncharacterized 52.8 kDa protein in TAR-I ttuC' 3'region | 6,58 | 1,94 |
| SL2773 | <i>csiD</i> | Protein csiD | 1,04 | 11,87 |
| SL2774 | <i>ygaF</i> | Uncharacterized protein ygaF | -1,02 | 9,95 |
| SL2775 | <i>gabD</i> | Succinate-semialdehyde dehydrogenase [NADP+] | 1,99 | 12,61 |
| SL2776 | <i>gabT</i> | 4-aminobutyrate aminotransferase | 1,68 | 7,78 |
| SL2777 | <i>gabP</i> | GABA permease | 1,51 | 6,21 |
| SL2783 | <i>stpA</i> | DNA-binding protein stpA | -6,63 | -10,03 |
| SL2784 | <i>ygaW</i> | Uncharacterized protein ygaW | -2,45 | -3,82 |
| SL2794 | <i>proV</i> | Glycine betaine/L-proline transport ATP-binding protein proV | -3,01 | -1,46 |
| SL2823 | <i>hydN</i> | Electron transport protein hydN | -4,73 | -7,66 |
| SL2831 | <i>hycC</i> | Formate hydrogenlyase subunit 3 | -4,84 | -3,72 |
| SL2832 | <i>hycB</i> | Formate hydrogenlyase subunit 2 | -4,99 | -4,92 |
| SL2833 | <i>hycA</i> | Formate hydrogenlyase regulatory protein hycA | -2,89 | -7,96 |
| SL2844 | <i>znuB</i> | Probable iron transport system membrane protein HI_0359 | -2,82 | -3,87 |
| SL2845 | <i>yopJ</i> | Effector protein yopJ | -5,19 | -5,48 |
| SL2846 | - | Hypothetical | -8,00 | -14,85 |
| SL2847 | <i>sirC</i> | Transcriptional regulator sirC | -5,01 | -10,80 |
| SL2848 | - | Hypothetical | -10,57 | -20,93 |
| SL2849 | <i>orgB</i> | Oxygen-regulated invasion protein orgB | -4,16 | -9,10 |
| SL2850 | <i>orgA</i> | Oxygen-regulated invasion protein orgA | -8,93 | -21,71 |
| SL2851 | <i>prgK</i> | Lipoprotein prgK | -4,18 | -8,73 |
| SL2852 | <i>prgJ</i> | Protein prgJ | -3,95 | -8,23 |
| SL2853 | <i>prgl</i> | Protein prgl | -2,47 | -4,71 |
| SL2854 | <i>prgH</i> | Protein prgH | -6,16 | -18,46 |
| SL2855 | <i>hilD</i> | Transcriptional regulator hilD | -3,33 | -5,63 |
| SL2856 | <i>hilA</i> | Transcriptional regulator hilA | -8,69 | -10,34 |
| SL2857 | <i>iagB</i> | Invasion protein iagB | -6,81 | -7,09 |
| SL2858 | <i>sptP</i> | Secreted effector protein sptP | -5,70 | -5,53 |
| SL2859 | <i>sicP</i> | Chaperone protein sicP | -6,65 | -8,37 |
| SL2860 | <i>iacP</i> | Probable acyl carrier protein iacP | -10,41 | -21,34 |
| SL2861 | <i>sipA</i> | Cell invasion protein sipA | -8,69 | -15,35 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|-------------|--|--------------------------|------------------------------|
| SL2862 | <i>sipD</i> | Cell invasion protein sipD | -10,28 | -18,49 |
| SL2863 | <i>sipC</i> | Cell invasion protein sipC | -3,67 | -6,21 |
| SL2864 | <i>sipB</i> | Cell invasion protein sipB | -4,20 | -7,20 |
| SL2865 | <i>sicA</i> | Chaperone protein sicA | -5,55 | -8,04 |
| SL2866 | <i>spaS</i> | Surface presentation of antigens protein spaS | -21,32 | -21,68 |
| SL2867 | <i>spaR</i> | Surface presentation of antigens protein spaR | -23,99 | -22,12 |
| SL2868 | <i>spaQ</i> | Surface presentation of antigens protein SpaQ | -33,25 | -32,11 |
| SL2869 | <i>spaP</i> | Surface presentation of antigens protein spaP | -31,82 | -29,30 |
| SL2870 | <i>spaO</i> | Surface presentation of antigens protein SpaO | -14,20 | -14,14 |
| SL2871 | <i>spaN</i> | Surface presentation of antigens protein spaN | -10,53 | -9,31 |
| SL2872 | <i>spaM</i> | Surface presentation of antigens protein spaM | -8,84 | -10,63 |
| SL2873 | <i>spaL</i> | Probable ATP synthase spaL | -10,05 | -10,53 |
| SL2874 | <i>spaK</i> | Surface presentation of antigens protein spaK | -5,56 | -6,61 |
| SL2875 | <i>invA</i> | Invasion protein invA | -12,19 | -12,89 |
| SL2876 | <i>invE</i> | Invasion protein invE | -18,50 | -20,75 |
| SL2877 | <i>invG</i> | Protein invG | -6,34 | -8,31 |
| SL2878 | <i>invF</i> | Invasion protein invF | -5,21 | -8,31 |
| SL2879 | <i>invH</i> | Invasion lipoprotein invH | -5,38 | -10,98 |
| SL2881 | - | Hypothetical | -1,99 | -3,47 |
| SL2884 | - | Hypothetical | 1,87 | 6,08 |
| SL2885 | - | GCN5-Related N-Acetyltransferase | 1,67 | 5,08 |
| SL2892 | <i>ygbN</i> | Uncharacterized permease HI_1015 | -1,02 | 3,82 |
| SL2893 | <i>rffG</i> | Uncharacterized protein HI_1014 | 1,08 | 4,43 |
| SL2894 | <i>ygbM</i> | Protein ygbM | -1,33 | 4,27 |
| SL2895 | <i>ygbL</i> | Putative aldolase class 2 protein ygbL | -1,08 | 5,99 |
| SL2896 | <i>ygbK</i> | Uncharacterized protein ygbK | -1,12 | 7,13 |
| SL2897 | <i>ygbJ</i> | Uncharacterized oxidoreductase ygbJ | 1,01 | 6,18 |
| SL2912 | <i>cysC</i> | Adenylyl-sulfate kinase | -1,13 | 9,51 |
| SL2913 | <i>cysN</i> | Sulfate adenylyltransferase subunit 1 | 1,02 | 11,16 |
| SL2914 | <i>cysD</i> | Sulfate adenylyltransferase subunit 2 | -1,47 | 4,76 |
| SL2915 | <i>iap</i> | Alkaline phosphatase isozyme conversion protein | -2,93 | -3,91 |
| SL2924 | <i>sopD</i> | Secreted effector protein sopD | -16,87 | -23,34 |
| SL2925 | <i>cysH</i> | Phosphoadenosine phosphosulfate reductase | -1,73 | 5,34 |
| SL2926 | <i>cysI</i> | Sulfite reductase [NADPH] hemoprotein beta-component | -2,06 | 6,16 |
| SL2927 | <i>cysJ</i> | Sulfite reductase [NADPH] flavoprotein alpha-component | -2,43 | 4,34 |
| SL2940 | <i>garK</i> | Glycerate kinase 2 | 3,66 | 1,41 |
| SL2941 | <i>gudD</i> | Glucarate dehydratase | 4,39 | 1,87 |
| SL2942 | <i>gudX</i> | Glucarate dehydratase-related protein | 6,36 | 3,30 |
| SL2943 | <i>gudP</i> | Probable glucarate transporter | 6,47 | 5,33 |
| SL2950 | <i>sdaC</i> | Serine transporter | 6,74 | 2,59 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|---------------|--|--------------------------|------------------------------|
| SL2951 | <i>sdaB</i> | L-serine dehydratase 2 | 8,11 | 3,60 |
| SL2953 | <i>fucO</i> | Lactaldehyde reductase | 1,68 | 3,10 |
| SL2959 | <i>fucR</i> | L-fucose operon activator | 6,68 | 2,02 |
| SL2962 | <i>gcvA</i> | Glycine cleavage system transcriptional activator | -3,31 | -2,75 |
| SL2977 | <i>ppdB</i> | Preilin peptidase-dependent protein B | 7,11 | 2,36 |
| SL2978 | <i>ppdA</i> | Preilin peptidase-dependent protein A | 3,67 | 1,23 |
| SL2984 | <i>ygdQ</i> | UPF0053 inner membrane protein ygdQ | -3,45 | -4,13 |
| SL2991 | <i>lysA</i> | Diaminopimelate decarboxylase | -4,95 | -1,32 |
| SL2994 | <i>araE</i> | Arabinose-proton symporter | 2,27 | 4,71 |
| SL2996 | <i>kdul</i> | 4-deoxy-L-threo-5-hexosulose-uronate ketol-isomerase | 2,72 | 3,46 |
| SL2997 | <i>yqeF</i> | Probable acetyl-CoA acetyltransferase | 3,16 | 4,20 |
| SL3000 | <i>yqeG</i> | Inner membrane transport protein yqeG | -1,92 | -3,13 |
| SL3029 | <i>gcvP</i> | Glycine dehydrogenase [decarboxylating] | -4,23 | 1,01 |
| SL3042 | <i>argO</i> | Arginine exporter protein ArgO | 3,40 | -1,49 |
| SL3047 | <i>glmU</i> | Bifunctional protein glmU | 17,73 | 1,59 |
| SL3048 | - | Hypothetical | 11,28 | 3,16 |
| SL3049 | - | Permease Protein Of ABC-Type Cobalt Transporter | 6,30 | 2,71 |
| SL3050 | <i>cbiO1</i> | Cobalt import ATP-binding protein CbiO 1 | 4,71 | 2,22 |
| SL3051 | <i>cbiO</i> | Cobalt import ATP-binding protein CbiO | 4,26 | 2,12 |
| SL3053 | <i>yggG</i> | Uncharacterized metalloprotease yggG | -3,11 | -1,48 |
| SL3059 | <i>uxuB</i> | D-mannonate oxidoreductase | 1,95 | 3,52 |
| SL3064 | <i>yqgD</i> | Uncharacterized protein yqgD | -1,56 | -4,69 |
| SL3080 | <i>yggM</i> | Uncharacterized protein yggM | 9,61 | 2,39 |
| SL3081 | <i>ansB</i> | L-asparaginase 2 | 4,78 | 4,33 |
| SL3108 | <i>exuT</i> | Hexuronate transporter | 5,32 | 4,36 |
| SL3109 | <i>uxuA</i> | Mannanate dehydratase | 2,97 | 3,06 |
| SL3109 | <i>uxuA</i> | Mannanate dehydratase | 2,97 | 3,06 |
| SL3112 | <i>bdlA</i> | Biofilm dispersion protein BdlA | -3,42 | -3,40 |
| SL3125 | <i>yghW</i> | Uncharacterized protein yghW | -1,23 | -6,35 |
| SL3126 | <i>tse</i> | Methyl-accepting chemotaxis serine transducer | -1,18 | -8,28 |
| SL3129 | - | Hypothetical | -2,96 | -5,12 |
| SL3130 | - | Hypothetical | -3,85 | -7,27 |
| SL3134 | <i>b3007;</i> | Hypothetical | 4,98 | 1,27 |
| SL3143 | <i>yiiZ</i> | Uncharacterized protein yiiZ | 3,36 | 7,98 |
| SL3144 | - | C4-Dicarboxylate Transport System Permease Small Protein | 2,47 | 6,19 |
| SL3145 | <i>ygiK</i> | Uncharacterized protein ygiK | 1,15 | 3,14 |
| SL3163 | <i>ygiD</i> | Uncharacterized protein ygiD | -6,71 | -9,28 |
| SL3165 | - | Arylsulfotransferase | 1,45 | 3,35 |
| SL3166 | <i>dsbA</i> | Thiol:disulfide interchange protein dsbA | 1,18 | 3,06 |
| SL3167 | <i>dsbB</i> | Putative protein-disulfide oxidoreductase | 1,04 | 3,38 |
| SL3176 | <i>ygiM</i> | Uncharacterized protein ygiM | -1,46 | -3,56 |
| SL3183 | <i>rpsU</i> | 30S ribosomal protein S21 | -1,52 | -3,63 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|-------------|--|--------------------------|------------------------------|
| SL3189 | <i>tse</i> | Methyl-accepting chemotaxis serine transducer | -1,05 | -3,94 |
| SL3192 | <i>fadH</i> | 2,4-dienoyl-CoA reductase [NADPH] | 4,94 | 6,90 |
| SL3200 | <i>yqjB</i> | Uncharacterized protein yqjB | -1,66 | -3,22 |
| SL3209 | <i>yhaL</i> | Hypothetical Protein yhaL | 5,71 | 5,32 |
| SL3211 | <i>yhaO</i> | Inner membrane transport protein yhaO | 3,93 | 2,15 |
| SL3216 | <i>tdcB</i> | Threonine dehydratase catabolic | 4,61 | -2,06 |
| SL3217 | <i>tdcA</i> | HTH-type transcriptional regulator tdcA | 32,27 | 5,57 |
| SL3235 | <i>gatR</i> | Galactitol utilization operon repressor | 3,15 | 4,26 |
| SL3253 | <i>deaD</i> | Cold-shock DEAD box protein A | -7,63 | -8,59 |
| SL3262 | <i>argG</i> | Argininosuccinate synthase | -4,12 | 1,18 |
| SL3271 | <i>greA</i> | Transcription elongation factor greA | -2,91 | -320,40 |
| SL3275 | <i>rpmA</i> | 50S ribosomal protein L27 | 1,01 | -3,03 |
| SL3301 | <i>yhcC</i> | Uncharacterized protein yhcC | 2,46 | -3,69 |
| SL3304 | <i>yhcG</i> | Uncharacterized protein yhcG | 6,91 | 1,35 |
| SL3305 | <i>codB</i> | Cytosine permease | 3,48 | -1,80 |
| SL3306 | <i>codA</i> | Cytosine deaminase | 3,61 | -1,13 |
| SL3326 | <i>ttdB</i> | L(+)tartrate dehydratase subunit beta | 1,98 | 3,29 |
| SL3327 | <i>ttdA</i> | L(+)tartrate dehydratase subunit alpha | 2,64 | 4,25 |
| SL3328 | <i>yfbS</i> | Uncharacterized transporter MJ0672 | 2,26 | 3,26 |
| SL3331 | <i>mdh</i> | Malate dehydrogenase | 5,89 | 4,77 |
| SL3335 | <i>yhcO</i> | Uncharacterized protein yhcO | 2,41 | 5,06 |
| SL3357 | <i>dusB</i> | tRNA-dihydrouridine synthase B | -1,57 | -3,85 |
| SL3358 | <i>fis</i> | DNA-binding protein fis | -1,78 | -3,28 |
| SL3360 | <i>yhdU</i> | Uncharacterized protein yhdU | 2,98 | 1,74 |
| SL3372 | <i>smf</i> | Protein smf | 3,26 | 1,60 |
| SL3374 | <i>fmt</i> | Methionyl-tRNA formyltransferase | -4,23 | -3,52 |
| SL3375 | <i>rsmB</i> | Ribosomal RNA small subunit methyltransferase B | -4,63 | -4,60 |
| SL3376 | <i>trkA</i> | Trk system potassium uptake protein trkA | -3,78 | -2,57 |
| SL3411 | <i>bfd</i> | Bacterioferritin-associated ferredoxin | -4,61 | -4,45 |
| SL3419 | <i>yheO</i> | Uncharacterized protein yheO | -1,67 | -3,74 |
| SL3440 | <i>tsgA</i> | Protein tsgA | -3,97 | -2,99 |
| SL3441 | <i>nirB</i> | Nitrite reductase [NAD(P)H] large subunit | 4,39 | -3,09 |
| SL3442 | <i>nirD</i> | Nitrite reductase [NAD(P)H] small subunit | 3,43 | -6,95 |
| SL3443 | <i>nirC</i> | Probable nitrite transporter | 2,27 | -5,91 |
| SL3470 | <i>greB</i> | Transcription elongation factor greB | -2,08 | -59,94 |
| SL3472 | <i>feoA</i> | Ferrous iron transport protein A | -1,31 | -3,17 |
| SL3473 | <i>feoB</i> | Ferrous iron transport protein B | -1,62 | -3,20 |
| SL3482 | <i>malT</i> | HTH-type transcriptional regulator malT | 5,98 | 5,14 |
| SL3490 | <i>glpR</i> | Glycerol-3-phosphate regulon repressor | -3,00 | -1,84 |
| SL3498 | <i>ilvD</i> | Dihydroxy-acid dehydratase | 2,01 | 3,10 |
| SL3514 | - | Hypothetical | -1,47 | -3,60 |
| SL3520 | <i>ugpC</i> | sn-glycerol-3-phosphate import ATP-binding protein UgpC | 1,88 | 4,06 |
| SL3521 | <i>ugpE</i> | sn-glycerol-3-phosphate transport system permease protein ugpE | 1,31 | 3,15 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|-------------|--|--------------------------|------------------------------|
| SL3522 | <i>ugpA</i> | sn-glycerol-3-phosphate transport system permease protein ugpA | 1,19 | 3,48 |
| SL3523 | <i>ugpB</i> | sn-glycerol-3-phosphate-binding periplasmic protein ugpB | 3,38 | 12,09 |
| SL3524 | - | Death On Curing Protein | 1,71 | 4,53 |
| SL3525 | <i>yhhV</i> | Uncharacterized protein yhhV | 1,68 | 4,30 |
| SL3540 | <i>yhhN</i> | Uncharacterized membrane protein yhhN | -3,96 | -1,05 |
| SL3541 | <i>zntA</i> | Lead, cadmium, zinc and mercury-transporting ATPase | -1,05 | 3,05 |
| SL3543 | <i>tusA</i> | Sulfurtransferase tusA | -6,94 | -11,47 |
| SL3544 | <i>yhhQ</i> | Inner membrane protein yhhQ | -1,17 | -4,91 |
| SL3557 | <i>dtpB</i> | Dipeptide and tripeptide permease B | 2,86 | 3,02 |
| SL3559 | <i>prlC</i> | Oligopeptidase A | -3,84 | -2,03 |
| SL3563 | <i>ansB</i> | L-asparaginase | 12,37 | 32,54 |
| SL3564 | <i>dcuB</i> | Anaerobic C4-dicarboxylate transporter dcuB | 25,68 | 55,06 |
| SL3565 | <i>frlD</i> | Fructosamine kinase frlD | 24,98 | 33,42 |
| SL3566 | <i>frlB</i> | Fructosamine deglycase frlB | 25,25 | 33,98 |
| SL3569 | - | Hypothetical | 2,47 | 3,95 |
| SL3571 | <i>yhjB</i> | Putative HTH-type transcriptional regulator yhjB | -4,61 | -3,03 |
| SL3576 | <i>yhjH</i> | Cyclic di-GMP phosphodiesterase YhjH | 1,16 | -5,37 |
| SL3577 | <i>kdgK</i> | 2-dehydro-3-deoxygluconokinase | 4,44 | 4,32 |
| SL3579 | <i>dctA</i> | C4-dicarboxylate transport protein | 8,22 | 14,63 |
| SL3590 | - | Hypothetical Protein SL3590 | -3,58 | -1,82 |
| SL3592 | <i>dppF</i> | Dipeptide transport ATP-binding protein dppF | -3,99 | 1,31 |
| SL3593 | <i>dppD</i> | Dipeptide transport ATP-binding protein dppD | -4,77 | 1,11 |
| SL3594 | <i>dppC</i> | Dipeptide transport system permease protein dppC | -6,99 | -1,14 |
| SL3595 | <i>dppB</i> | Dipeptide transport system permease protein dppB | -7,97 | -1,12 |
| SL3596 | <i>dppA</i> | Periplasmic dipeptide transport protein | -2,14 | 3,36 |
| SL3614 | <i>yiaG</i> | Uncharacterized HTH-type transcriptional regulator yiaG | 3,52 | 1,04 |
| SL3628 | <i>bax</i> | Protein bax | -2,16 | -9,21 |
| SL3633 | <i>dlgD</i> | 2,3-diketo-L-gulonate reductase | 3,90 | 4,51 |
| SL3638 | <i>yiaO</i> | 2,3-diketo-L-gulonate-binding periplasmic protein yiaO | 1,64 | 4,21 |
| SL3641 | <i>sgbU</i> | Putative L-ribulose-5-phosphate 3-epimerase sgbU | 2,13 | 3,77 |
| SL3643 | <i>yisR</i> | Uncharacterized HTH-type transcriptional regulator yisR | 2,76 | 4,41 |
| SL3644 | - | Hypothetical | 2,01 | 4,20 |
| SL3645 | <i>aldB</i> | Aldehyde dehydrogenase B | 3,84 | 2,38 |
| SL3650 | <i>mtlA</i> | PTS system mannitol-specific EIICBA component | 2,62 | 3,05 |
| SL3653 | <i>yibT</i> | Uncharacterized protein yibT | 1,96 | 5,71 |
| SL3659 | <i>lldD</i> | L-lactate dehydrogenase [cytochrome] | 2,43 | 3,49 |
| SL3660 | <i>yibK</i> | Uncharacterized tRNA/rRNA methyltransferase yibK | 3,68 | -1,22 |
| SL3662 | <i>mdlA</i> | Mandelate racemase | 2,01 | 4,34 |
| SL3663 | <i>gudP</i> | Probable glucarate transporter | 2,07 | 4,44 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|--------------|---|--------------------------|------------------------------|
| SL3670 | <i>gpmI</i> | 2,3-bisphosphoglycerate-independent phosphoglycerate mutase | -1,28 | -3,23 |
| SL3674 | <i>tdh</i> | L-threonine 3-dehydrogenase | 4,44 | 3,79 |
| SL3675 | <i>kbl</i> | Putative 8-amino-7-oxononanoate synthase/2-amino-3-ketobutyrate coenzyme A ligase | 6,06 | 2,94 |
| SL3690 | <i>waaA</i> | 3-deoxy-D-manno-octulosonic-acid transferase | 3,06 | -1,20 |
| SL3695 | <i>yicR</i> | UPF0758 protein yicR | 15,77 | 3,41 |
| SL3704 | <i>yicG</i> | UPF0126 inner membrane protein yicG | -1,74 | -3,47 |
| SL3705 | <i>ligB</i> | DNA ligase B | 10,68 | 1,50 |
| SL3711 | - | Cytoplasmic Protein | 1,98 | 5,37 |
| SL3712 | <i>gltS</i> | Sodium/glutamate symport carrier protein | 3,17 | 5,98 |
| SL3713 | <i>xanP</i> | Xanthine permease XanP | 3,94 | 1,11 |
| SL3728 | <i>mgtB</i> | Magnesium-transporting ATPase, P-type 1 | -7,14 | -4,80 |
| SL3729 | <i>mgtC</i> | Protein mgtC | -44,71 | -24,09 |
| SL3740 | <i>gmuD</i> | 6-phospho-beta-glucosidase gmuD | 3,39 | 2,95 |
| SL3742 | <i>nepI</i> | Purine ribonucleoside efflux pump nepI | -3,40 | -4,69 |
| SL3743 | - | Hypothetical | 2,38 | 3,57 |
| SL3744 | <i>yiaG</i> | Transcriptional Regulator XRE Family | 2,32 | 3,84 |
| SL3750 | <i>gatA</i> | PTS IIA-Like Nitrogen-Regulatory Protein PtsN | 2,98 | 1,99 |
| SL3751 | <i>mngR</i> | Mannosyl-D-glycerate transport/metabolism system repressor mngR | 5,24 | 3,65 |
| SL3752 | <i>yicN</i> | Uncharacterized protein yicN | 3,22 | 1,11 |
| SL3753 | <i>uhpT</i> | Hexose phosphate transport protein | 3,98 | 1,42 |
| SL3757 | - | Hypothetical | 1,17 | 3,49 |
| SL3758 | <i>fucP</i> | L-fucose-proton symporter | 1,27 | 3,39 |
| SL3759 | <i>rbsK</i> | Ribokinase | 1,43 | 3,60 |
| SL3761 | <i>ilvN</i> | Acetolactate synthase isozyme 1 small subunit | 2,70 | 4,96 |
| SL3762 | <i>ilvB</i> | Acetolactate synthase isozyme 1 large subunit | 3,33 | 5,91 |
| SL3768 | <i>dsdC</i> | HTH-type transcriptional regulator dsdC | 3,74 | 3,96 |
| SL3774 | <i>yidE</i> | Putative transport protein CKO_00031 | 3,18 | 5,60 |
| SL3776 | <i>ibpA</i> | Small heat shock protein ibpA | -1,03 | 3,13 |
| SL3786 | <i>yhjA</i> | Probable cytochrome c peroxidase | -3,11 | -2,69 |
| SL3789 | <i>torC</i> | Cytochrome c-type protein torC | -1,90 | -3,23 |
| SL3790 | <i>torR</i> | TorCAD operon transcriptional regulatory protein torR | 2,32 | 4,44 |
| SL3794 | <i>dgoD1</i> | D-galactonate dehydratase 1 | -1,03 | 3,20 |
| SL3799 | <i>gudP</i> | Probable glucarate transporter | 1,54 | 4,70 |
| SL3800 | <i>dgoD</i> | D-galactonate dehydratase | 1,33 | 3,13 |
| SL3801 | <i>ybhD</i> | Uncharacterized HTH-type transcriptional regulator ybhD | 2,82 | 4,56 |
| SL3814 | <i>mdtL</i> | Multidrug resistance protein mdtL | -1,22 | -3,71 |
| SL3831 | <i>atpC</i> | ATP synthase epsilon chain | 1,81 | 3,56 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|--------------|---|--------------------------|------------------------------|
| SL3848 | <i>rbsD</i> | D-ribose pyranase | -4,44 | -2,87 |
| SL3849 | <i>rbsA1</i> | Ribose import ATP-binding protein RbsA 1 | -4,19 | -2,95 |
| SL3859 | <i>yifE</i> | UPF0438 protein yifE | 7,01 | 1,55 |
| SL3861 | <i>ilvG</i> | Acetolactate synthase isozyme 2 large subunit | 1,88 | 3,17 |
| SL3862 | <i>ilvM</i> | Acetolactate synthase isozyme 2 small subunit | 2,57 | 5,19 |
| SL3871 | - | Inner Membrane Protein | 3,48 | 1,45 |
| SL3876 | <i>rho</i> | Transcription termination factor rho | -2,45 | -3,61 |
| SL3889 | <i>yifK</i> | Probable transport protein yifK | 3,81 | 1,60 |
| SL3894 | <i>cyaA</i> | Adenylate cyclase | -3,10 | -2,83 |
| SL3906 | <i>corA</i> | Magnesium transport protein corA | -1,38 | -3,08 |
| SL3935 | <i>fadA</i> | 3-ketoacyl-CoA thiolase | 5,63 | 23,14 |
| SL3936 | <i>fadB</i> | Fatty acid oxidation complex subunit alpha | 5,93 | 22,96 |
| SL3954 | <i>glnA</i> | Glutamine synthetase | -3,78 | -1,77 |
| SL3962 | <i>ompL</i> | Porin ompL | 2,21 | 3,58 |
| SL3967 | <i>yihS</i> | Uncharacterized sugar isomerase yihS | 1,59 | 4,13 |
| SL3968 | <i>yihT</i> | Uncharacterized aldolase yihT | 1,89 | 4,63 |
| SL3969 | <i>yihU</i> | Uncharacterized oxidoreductase yihU | 1,52 | 6,23 |
| SL3970 | <i>yihV</i> | Uncharacterized sugar kinase yihV | 3,53 | 3,37 |
| SL3978 | <i>est</i> | Esterase | 3,79 | 3,87 |
| SL3989 | - | Hypothetical | -3,77 | -2,15 |
| SL3997 | <i>rhaS</i> | HTH-type transcriptional activator rhaS | 5,18 | 7,48 |
| SL3998 | <i>rhaR</i> | HTH-type transcriptional activator rhaR | 5,45 | 3,48 |
| SL4009 | <i>cpxP</i> | Periplasmic protein cpxP | -2,98 | -1,82 |
| SL4012 | <i>sbp</i> | Sulfate-binding protein | 1,01 | 3,15 |
| SL4014 | <i>yagG</i> | Uncharacterized symporter yagG | 2,24 | 6,83 |
| SL4015 | <i>scrK</i> | Fructokinase | 2,56 | 7,32 |
| SL4016 | <i>yegU</i> | Uncharacterized protein yegU | 1,69 | 4,60 |
| SL4020 | - | Conserved Hypothetical Protein | 1,41 | 3,55 |
| SL4021 | <i>lsrK</i> | Autoinducer 2 kinase lsrK | 1,54 | 5,12 |
| SL4022 | <i>lsrR</i> | Transcriptional regulator lsrR | 3,64 | 5,81 |
| SL4023 | <i>lsrA</i> | Autoinducer 2 import ATP-binding protein lsrA | 22,29 | 49,79 |
| SL4024 | <i>lsrC</i> | Autoinducer 2 import system permease protein lsrC | 5,57 | 18,13 |
| SL4025 | <i>lsrD</i> | Autoinducer 2 import system permease protein lsrD | 2,42 | 9,85 |
| SL4053 | - | Hypothetical | 3,84 | 1,48 |
| SL4054 | <i>yfkN</i> | Trifunctional nucleotide phosphoesterase protein yfkN | 3,68 | 1,50 |
| SL4055 | <i>metF</i> | 5,10-methylenetetrahydrofolate reductase | 1,08 | -3,35 |
| SL4056 | <i>katG1</i> | Catalase-peroxidase 1 | -2,70 | -3,75 |
| SL4057 | <i>yijF</i> | Uncharacterized protein yijF | -5,09 | -8,02 |
| SL4061 | <i>frwC</i> | Fructose-like permease IIC component 2 | 17,80 | 5,71 |
| SL4062 | <i>frwB</i> | Fructose-like phosphotransferase enzyme IIB component 2 | 7,78 | 3,40 |
| SL4069 | <i>ppc</i> | Phosphoenolpyruvate carboxylase | -4,32 | -1,26 |
| SL4071 | <i>argC</i> | N-acetyl-gamma-glutamyl-phosphate reductase | -2,98 | 1,02 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|-------------|--|--------------------------|------------------------------|
| SL4098 | <i>thiH</i> | Dehydroglycine synthase | 1,93 | 3,47 |
| SL4099 | <i>thiG</i> | Thiazole synthase | 2,29 | 4,86 |
| SL4100 | <i>thiS</i> | Sulfur carrier protein ThiS | 2,18 | 3,53 |
| SL4101 | <i>thiF</i> | Sulfur carrier protein ThiS adenylyltransferase | 2,18 | 4,02 |
| SL4102 | <i>thiE</i> | Thiamine-phosphate pyrophosphorylase | 1,73 | 3,49 |
| SL4103 | <i>thiC</i> | Phosphomethylpyrimidine synthase | 1,64 | 3,16 |
| SL4104 | <i>rsd</i> | Regulator of sigma D | 2,95 | 3,58 |
| SL4118 | <i>aceB</i> | Malate synthase A | 1,65 | 7,52 |
| SL4119 | <i>aceA</i> | Isocitrate lyase | 1,95 | 4,68 |
| SL4131 | - | Hypothetical | -1,33 | -4,83 |
| SL4142 | - | Phage Baseplate Assembly Protein V | 2,41 | 3,49 |
| SL4159 | <i>yjbF</i> | Uncharacterized lipoprotein yjbF | -3,86 | -2,28 |
| SL4160 | <i>yjbG</i> | Uncharacterized protein yjbG | -3,95 | -1,70 |
| SL4162 | <i>psiE</i> | Protein psiE | -4,25 | -3,30 |
| SL4164 | <i>malF</i> | Maltose transport system permease protein malF | 4,45 | 1,14 |
| SL4165 | - | Hypothetical Protein SL4165 | 11,67 | 2,30 |
| SL4166 | <i>malE</i> | Maltose-binding periplasmic protein | 3,45 | 1,50 |
| SL4167 | <i>malK</i> | Maltose/maltodextrin import ATP-binding protein MalK | 12,13 | 1,67 |
| SL4180 | <i>pspG</i> | Phage shock protein G | -3,56 | -2,02 |
| SL4185 | <i>aphA</i> | Class B acid phosphatase | 5,38 | 2,41 |
| SL4193 | - | Hypothetical | -8,63 | -26,54 |
| SL4194 | - | Integral Membrane Protein | -8,57 | -26,23 |
| SL4195 | <i>tolC</i> | Outer membrane protein tolC | -7,84 | -22,66 |
| SL4196 | <i>prtE</i> | Proteases secretion protein prtE | -7,15 | -31,87 |
| SL4197 | - | Hypothetical | -8,49 | -18,80 |
| SL4198 | <i>IktB</i> | Leukotoxin translocation ATP-binding protein IktB | -17,32 | -46,89 |
| SL4199 | <i>yjcB</i> | Uncharacterized protein yjcB | -20,52 | -9,86 |
| SL4200 | <i>yjcC</i> | Uncharacterized protein yjcC | -6,40 | -3,42 |
| SL4201 | <i>soxS</i> | Regulatory protein soxS | -2,53 | -3,63 |
| SL4207 | <i>cidA</i> | Holin-like protein cidA | -9,77 | -19,38 |
| SL4208 | <i>ywbG</i> | Uncharacterized protein ywbG | -15,23 | -19,43 |
| SL4209 | <i>actP</i> | Cation/acetate symporter ActP | 2,48 | 13,02 |
| SL4210 | <i>yjcH</i> | Inner membrane protein yjcH | 5,66 | 39,97 |
| SL4211 | <i>acs</i> | Acetyl-coenzyme A synthetase | 4,90 | 21,68 |
| SL4212 | - | Hypothetical | 2,23 | 3,32 |
| SL4213 | <i>nrfA</i> | Cytochrome c-552 | 5,15 | 2,13 |
| SL4214 | <i>nrfB</i> | Cytochrome c-type protein nrfB | 3,64 | -1,02 |
| SL4230 | <i>eptA</i> | Phosphoethanolamine transferase eptA | -4,20 | -1,50 |
| SL4231 | <i>adiC</i> | Arginine/agmatine antiporter | 1,36 | -4,64 |
| SL4234 | <i>melR</i> | Melibiose operon regulatory protein | 5,38 | 6,19 |
| SL4238 | <i>dcuB</i> | Anaerobic C4-dicarboxylate transporter dcuB | -9,28 | -11,02 |
| SL4239 | - | Hypothetical | -39,41 | -24,27 |
| SL4247 | <i>yjiK</i> | Uncharacterized protein yjiK | -15,24 | -24,46 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|--------------|--|--------------------------|------------------------------|
| SL4248 | - | Hypothetical | -8,48 | -28,20 |
| SL4249 | - | Cytoplasmic Protein | -9,33 | -41,36 |
| SL4250 | <i>yjjQ</i> | GerE Family Regulatory Protein | -9,42 | -60,33 |
| SL4251 | <i>sirC</i> | Transcriptional regulator sirC | -8,74 | -47,96 |
| SL4252 | - | Hypothetical | -6,03 | -5,47 |
| SL4253 | - | Hypothetical | -3,33 | -2,43 |
| SL4266 | <i>groS</i> | 10 kDa chaperonin | 1,75 | 3,79 |
| SL4282 | <i>yjeM</i> | Inner membrane transporter yjeM | -2,23 | -3,47 |
| SL4310 | <i>aidB</i> | Protein AidB | 7,60 | 9,60 |
| SL4311 | <i>yjfN</i> | Uncharacterized protein yjfN | 9,48 | 6,64 |
| SL4312 | <i>bsmA</i> | Lipoprotein BsmA | 8,24 | 5,00 |
| SL4316 | <i>ulaA</i> | Ascorbate-specific permease IIC component ulA | 3,66 | 9,06 |
| SL4317 | <i>ulaB</i> | Ascorbate-specific phosphotransferase enzyme IIB component | 2,92 | 6,92 |
| SL4318 | <i>ulaC</i> | Ascorbate-specific phosphotransferase enzyme IIA component | 2,55 | 5,04 |
| SL4319 | <i>ulaD</i> | 3-keto-L-gulonate-6-phosphate decarboxylase ulAD | 1,74 | 3,02 |
| SL4336 | <i>cpdB</i> | 2',3'-cyclic-nucleotide 2'-phosphodiesterase/3'-nucleotidase | 4,02 | 4,00 |
| SL4351 | <i>xylE</i> | D-xylose-proton symporter | 1,22 | 7,99 |
| SL4353 | <i>iolB</i> | 5-deoxy-glucuronate isomerase | 1,78 | 3,00 |
| SL4354 | <i>iolA1</i> | Methylmalonate semialdehyde dehydrogenase [acylating] 1 | 1,66 | 3,93 |
| SL4355 | <i>ydiP</i> | Uncharacterized HTH-type transcriptional regulator ydiP | 4,58 | 6,37 |
| SL4361 | <i>iolC</i> | 5-dehydro-2-deoxygluconokinase | 2,80 | 5,41 |
| SL4362 | <i>iolD1</i> | 3D-(3,5/4)-trihydroxycyclohexane-1,2-dione hydrolase 1 | 2,17 | 5,81 |
| SL4383 | - | Hypothetical | 5,18 | -1,04 |
| SL4384 | <i>treC</i> | Trehalose-6-phosphate hydrolase | 10,59 | 2,06 |
| SL4385 | <i>treB</i> | PTS system trehalose-specific EIIBC component | 37,70 | 2,48 |
| SL4390 | <i>pyrI</i> | Aspartate carbamoyltransferase regulatory chain | 4,61 | 1,05 |
| SL4391 | <i>pyrB</i> | Aspartate carbamoyltransferase | 3,84 | -1,15 |
| SL4392 | <i>pyrL</i> | PyrBI operon leader peptide | 3,07 | -1,50 |
| SL4397 | <i>arcA</i> | Arginine deiminase | 3,40 | 1,41 |
| SL4412 | <i>idnT</i> | Gnt-II system L-idonate transporter | 1,46 | 3,38 |
| SL4413 | <i>idnO</i> | Gluconate 5-dehydrogenase | 1,86 | 3,80 |
| SL4414 | <i>idnD</i> | L-idonate 5-dehydrogenase | 2,80 | 4,59 |
| SL4431 | - | UPF0386 protein KPN78578_02510 | 5,45 | 2,78 |
| SL4432 | - | Hypothetical | 4,12 | 1,88 |
| SL4434 | - | Hypothetical | -5,31 | -4,98 |
| SL4460 | - | Hypothetical | 2,69 | 3,02 |
| SL4463 | <i>yjiY</i> | Inner membrane protein yjiY | -3,30 | -18,87 |
| SL4466 | <i>manX</i> | PTS System Fructocific IIA Component | 5,24 | 13,66 |
| SL4467 | <i>manX</i> | Probable phosphotransferase enzyme IIB component M6_Spy0801 | 4,12 | 15,83 |

Tabla Suplementaria 5Genes afectados en las cepas mutantes *dksA* y *greAgreB*, respecto a la cepa WT

| ID | gene | Description | <i>dksA</i> vs WT | <i>greAgreB</i> vs WT |
|-----------|-------------|--|--------------------------|------------------------------|
| SL4468 | <i>agaC</i> | N-acetylgalactosamine permease IIC component 1 | 3,49 | 17,29 |
| SL4469 | <i>manZ</i> | Mannose permease IID component | 2,92 | 14,20 |
| SL4470 | <i>glmS</i> | Glucosamine--fructose-6-phosphate aminotransferase [isomerizing] | 2,82 | 23,21 |
| SL4471 | <i>friB</i> | Fructosamine deglycase friB | 1,19 | 14,58 |
| SL4492 | <i>yjjW</i> | Uncharacterized protein yjjW | 6,32 | 1,57 |
| SL4493 | <i>yjjI</i> | Uncharacterized protein yjjI | 6,45 | 1,64 |
| SLP1_0030 | <i>traE</i> | Protein traE | -3,15 | -1,55 |
| SLP1_0031 | <i>traL</i> | Protein traL | -3,38 | -1,36 |
| SLP1_0054 | <i>parB</i> | Plasmid Partition par B protein | 3,01 | 5,19 |
| SLP1_0055 | <i>parA</i> | Plasmid partition protein A | 3,75 | 5,75 |
| SLP1_0067 | <i>spvA</i> | 28.1 kDa virulence protein | 1,16 | -6,22 |
| SLP1_0068 | <i>spvB</i> | 65 kDa virulence protein | 1,35 | -12,28 |
| SLP1_0069 | <i>spvC</i> | 27.5 kDa virulence protein | -1,61 | -34,55 |
| SLP1_0070 | <i>spvD</i> | Virulence protein vsdE | -2,05 | -10,27 |
| SLP1_0080 | <i>ccdB</i> | Protein CcdB | 2,99 | 2,95 |
| SLP2_0003 | - | Hypothetical | 3,16 | 4,59 |
| SLP2_0004 | - | Addiction Module Antitoxin | 2,74 | 3,55 |
| SLP2_0005 | <i>dnaQ</i> | Uncharacterized protein pSLT049 | 5,21 | 4,21 |
| SLP2_0012 | <i>cib</i> | Colicin-Ib | 1,63 | 4,20 |
| SLP2_0032 | <i>yubI</i> | Putative antirestriction protein YubI | 3,23 | 3,00 |
| SLP2_0033 | <i>yubJ</i> | Uncharacterized protein yubJ | 2,54 | 3,01 |
| SLP2_0037 | <i>psiB</i> | Protein psiB | 2,79 | 4,39 |
| SLP2_0038 | <i>psiA</i> | Protein psiA | 3,67 | 5,34 |
| SLP2_0039 | - | Hypothetical | 3,30 | 4,78 |
| SLP2_0078 | - | Hypothetical | 1,11 | 3,93 |
| SLP2_0079 | - | Hypothetical | 1,63 | 3,02 |
| SLP2_0086 | - | Prephilin Peptidase | 1,25 | -3,05 |
| SLP3_0011 | <i>mobC</i> | Mobilization protein C | 1,44 | 3,03 |