# Supplementary Table: Gene counts per combined cycle class

| combined\_cycle | gene | gene\_count |
| --- | --- | --- |
| SOX | soxZ | 2,543 |
| SOX | soxC | 2,289 |
| SOX | soxX | 2,108 |
| SOX | soxB | 1,879 |
| SOX | soxY | 1,824 |
| SOX | soxA | 1,648 |
| SOX | soxD | 467 |
| aceti\_met | ackA | 28,568 |
| aceti\_met | acs | 18,794 |
| aceti\_met | acdA | 10,274 |
| aceti\_met | cooS | 1,098 |
| aceti\_met | cooF | 630 |
| aceti\_met | acdB | 587 |
| aceti\_met | cdhC | 383 |
| aceti\_met | cdhA | 276 |
| aceti\_met | cdhD | 245 |
| aceti\_met | cdhE | 213 |
| aceti\_met | cdhB | 179 |
| aceti\_met | acsC | 92 |
| aceti\_met | acsD | 92 |
| annamox | hzo | 1,138 |
| annamox | hzsB | 514 |
| annamox | hzsA | 250 |
| annamox | hzsC | 198 |
| annamox | hdh | 3 |
| assnitred | nasA | 3,070 |
| assnitred | NR | 1,035 |
| assnitred | narB | 894 |
| assnitred | nirA | 882 |
| assnitred | nasB | 270 |
| assnitred | narC | 66 |
| asssulred | cysC | 18,066 |
| asssulred | cysD | 15,555 |
| asssulred | cysQ | 13,493 |
| asssulred | cysH | 13,423 |
| asssulred | cysN | 12,008 |
| asssulred | cysJ | 9,843 |
| asssulred | cysI | 8,039 |
| asssulred | nrnA | 2,774 |
| asssulred | sir | 2,042 |
| cenmetpat | mbhJ | 767 |
| cenmetpat | ehbE | 293 |
| cenmetpat | mvhD | 223 |
| cenmetpat | echE | 201 |
| cenmetpat | mvhA | 150 |
| cenmetpat | vhtG | 129 |
| cenmetpat | ehbA | 123 |
| cenmetpat | ehbQ | 82 |
| cenmetpat | echA | 77 |
| cenmetpat | echC | 73 |
| cenmetpat | mbhL | 73 |
| cenmetpat | mvhG | 72 |
| cenmetpat | vhuD | 70 |
| cenmetpat | echB | 68 |
| cenmetpat | ehbH | 62 |
| cenmetpat | ehaN | 53 |
| cenmetpat | ehaB | 51 |
| cenmetpat | ehbI | 50 |
| cenmetpat | ehaO | 48 |
| cenmetpat | ehaG | 47 |
| cenmetpat | ehaH | 47 |
| cenmetpat | mbhK | 44 |
| cenmetpat | vhcD | 44 |
| cenmetpat | ehaJ | 43 |
| cenmetpat | ehbN | 42 |
| cenmetpat | vhuA | 42 |
| cenmetpat | ehbO | 41 |
| cenmetpat | ehaF | 38 |
| cenmetpat | ehbK | 37 |
| cenmetpat | ehbM | 37 |
| cenmetpat | ehaE | 36 |
| cenmetpat | ehbL | 36 |
| cenmetpat | ehbP | 34 |
| cenmetpat | ehbD | 33 |
| cenmetpat | ehaQ | 32 |
| cenmetpat | ehbC | 32 |
| cenmetpat | ehaL | 31 |
| cenmetpat | ehaA | 28 |
| cenmetpat | ehaC | 27 |
| cenmetpat | ehaR | 27 |
| cenmetpat | ehaP | 26 |
| cenmetpat | ehbF | 26 |
| cenmetpat | ehbB | 25 |
| cenmetpat | ehaD | 22 |
| cenmetpat | ehaM | 22 |
| cenmetpat | ehaI | 21 |
| cenmetpat | vhcA | 21 |
| cenmetpat | vhuG | 20 |
| cenmetpat | ehbG | 19 |
| cenmetpat | vhcG | 13 |
| cenmetpat | vhuU | 11 |
| cenmetpat | ehaK | 9 |
| cenmetpat | ehbJ | 8 |
| cenmetpat | echD | 3 |
| cenmetpat | echF | 3 |
| cenmetpat,aom | mcrA | 13,220 |
| cenmetpat,aom | rnfD | 8,245 |
| cenmetpat,aom | rnfC | 7,077 |
| cenmetpat,aom | rnfE | 7,035 |
| cenmetpat,aom | rnfB | 6,980 |
| cenmetpat,aom | rnfG | 5,328 |
| cenmetpat,aom | rnfA | 5,296 |
| cenmetpat,aom | fpoB | 3,433 |
| cenmetpat,aom | fpoL | 2,956 |
| cenmetpat,aom | fpoK | 1,891 |
| cenmetpat,aom | fpoM | 912 |
| cenmetpat,aom | fpoH | 554 |
| cenmetpat,aom | hdrA2 | 523 |
| cenmetpat,aom | fpoA | 441 |
| cenmetpat,aom | mtrA | 339 |
| cenmetpat,aom | mtrD | 246 |
| cenmetpat,aom | mtrH | 246 |
| cenmetpat,aom | mcrB | 242 |
| cenmetpat,aom | mtrE | 239 |
| cenmetpat,aom | mcrG | 224 |
| cenmetpat,aom | mcrC | 214 |
| cenmetpat,aom | fpoJ | 211 |
| cenmetpat,aom | fpoN | 203 |
| cenmetpat,aom | mtrC | 175 |
| cenmetpat,aom | mcrD | 169 |
| cenmetpat,aom | hdrA1 | 166 |
| cenmetpat,aom | mtrG | 158 |
| cenmetpat,aom | mtrB | 136 |
| cenmetpat,aom | frhA | 133 |
| cenmetpat,aom | fpoC | 112 |
| cenmetpat,aom | mtrF | 112 |
| cenmetpat,aom | hdrB1 | 107 |
| cenmetpat,aom | frhD | 100 |
| cenmetpat,aom | frhG | 87 |
| cenmetpat,aom | frhB | 85 |
| cenmetpat,aom | fpoD | 70 |
| cenmetpat,aom | hdrC2 | 67 |
| cenmetpat,aom | hdrB2 | 64 |
| cenmetpat,aom | hdrC1 | 62 |
| cenmetpat,aom | fpoI | 46 |
| cenmetpat,aom | fpoO | 35 |
| cenmetpat,aom | fpoF | 31 |
| cenmetpat,aom | fqoD | 16 |
| cenmetpat,aom | fqoL | 13 |
| cenmetpat,aom | fqoM | 10 |
| cenmetpat,aom | fqoN | 10 |
| cenmetpat,aom | fqoH | 9 |
| cenmetpat,aom | fqoK | 9 |
| cenmetpat,aom | fqoF | 8 |
| cenmetpat,aom | fqoA | 4 |
| cenmetpat,aom | fqoJ | 4 |
| denitrification | nosZ | 10,822 |
| denitrification | norB | 1,782 |
| denitrification | nirK | 1,677 |
| denitrification | norC | 469 |
| denitrification | nirS | 414 |
| dissnitred | nirB | 4,052 |
| dissnitred | nirD | 3,054 |
| dissnitred | nrfA | 649 |
| dissnitred | nrfC | 419 |
| dissnitred | nrfD | 349 |
| dissnitred | nrfB | 305 |
| dsro | dsrB | 6,185 |
| dsro | dsrA | 5,320 |
| dsro | aprA | 273 |
| dsro | dsrC | 240 |
| dsro | aprB | 239 |
| dsro | dsrM | 184 |
| dsro | dsrK | 181 |
| dsro | qmoB | 149 |
| dsro | dsrH | 148 |
| dsro | dsrF | 134 |
| dsro | qmoA | 126 |
| dsro | dsrE | 116 |
| dsro | rdsr | 112 |
| dsro | qmoC | 88 |
| dsro | dsrP | 74 |
| dsro | dsrD | 40 |
| dsro | dsrO | 38 |
| dsro | dsrL | 35 |
| dsro | dsrJ | 34 |
| dsro | dsrT | 17 |
| dsro | dsrN | 4 |
| in\_or\_sul | cysK | 29,791 |
| in\_or\_sul | cysE | 17,731 |
| in\_or\_sul | metC | 14,482 |
| in\_or\_sul | ssuD | 11,361 |
| in\_or\_sul | metB | 9,821 |
| in\_or\_sul | metZ | 9,821 |
| in\_or\_sul | cysM | 8,570 |
| in\_or\_sul | tauD | 5,750 |
| in\_or\_sul | metA | 5,307 |
| in\_or\_sul | metY | 5,002 |
| in\_or\_sul | metX | 4,326 |
| in\_or\_sul | ssuE | 3,314 |
| in\_or\_sul | xsc | 1,865 |
| in\_or\_sul | mccB | 1,138 |
| in\_or\_sul | cuyA | 1,046 |
| in\_or\_sul | suyA | 710 |
| in\_or\_sul | suyB | 394 |
| in\_or\_sul | tmoC | 124 |
| in\_or\_sul | tbuC | 57 |
| in\_or\_sul | tbuB | 26 |
| in\_or\_sul | mtoX | 22 |
| in\_or\_sul | msmA | 15 |
| in\_or\_sul | msmB | 10 |
| in\_or\_sul | touF | 8 |
| in\_or\_sul | cysO | 6 |
| in\_or\_sul | touC | 6 |
| in\_or\_sul | tmoF | 3 |
| methyl\_met | torA | 2,771 |
| methyl\_met | torZ | 1,574 |
| methyl\_met | torD | 1,467 |
| methyl\_met | torC | 995 |
| methyl\_met | torY | 739 |
| methyl\_met | mtbC | 705 |
| methyl\_met | mttC | 149 |
| methyl\_met | mtaB | 101 |
| methyl\_met | mtaC | 91 |
| methyl\_met | mtaA | 88 |
| methyl\_met | mtbB | 80 |
| methyl\_met | mtmB | 75 |
| methyl\_met | mttB | 54 |
| methyl\_met | mtmC | 52 |
| methyl\_met | mtbA | 29 |
| nitfix | nifH | 14,740 |
| nitfix | nifD | 1,738 |
| nitfix | nifK | 1,004 |
| nitfix | nifW | 622 |
| nitfix | anfG | 57 |
| nitrification | amoA\_A | 20,561 |
| nitrification | amoA\_B | 8,683 |
| nitrification | nxrB | 270 |
| nitrification | nxrA | 206 |
| nitrification | hao | 79 |
| nitrification | amoB\_A | 48 |
| nitrification | amoC\_A | 22 |
| nitrification | amoC\_B | 19 |
| nitrification | amoB\_B | 10 |
| nitrogen\_other | hcp | 4,455 |
| odegsyn | glnA | 15,551 |
| odegsyn | nmo | 9,245 |
| odegsyn | ureC | 7,526 |
| odegsyn | glsA | 6,657 |
| odegsyn | asnB | 6,317 |
| odegsyn | ureB | 5,211 |
| odegsyn | ureA | 4,239 |
| odegsyn | gdh\_K00262 | 3,143 |
| odegsyn | gs\_K00266 | 3,107 |
| odegsyn | gdh\_K00261 | 2,379 |
| odegsyn | gdh\_K15371 | 2,377 |
| odegsyn | gs\_K00265 | 2,183 |
| odegsyn | ansB | 621 |
| odegsyn | gs\_K00284 | 472 |
| odegsyn | gdh\_K00260 | 431 |
| odegsyn | gs\_K00264 | 365 |
| odegsyn | nao | 209 |
| org\_phos\_hyd | glpQ | 4,260 |
| org\_phos\_hyd | phoX | 4,172 |
| org\_phos\_hyd | phoD | 2,487 |
| org\_phos\_hyd | phoA | 2,211 |
| org\_phos\_hyd | ugpQ | 876 |
| org\_phos\_hyd | aphA | 690 |
| org\_phos\_hyd | phy | 388 |
| org\_phos\_hyd | phoN | 236 |
| org\_phos\_hyd | opd | 149 |
| org\_phos\_hyd | appA | 123 |
| org\_phos\_hyd | pafA | 120 |
| org\_phos\_hyd | olpA | 113 |
| org\_phos\_hyd | phoC | 71 |
| org\_sul\_trans | betB | 17,909 |
| org\_sul\_trans | betA | 13,113 |
| org\_sul\_trans | dmsA | 8,641 |
| org\_sul\_trans | betC | 4,073 |
| org\_sul\_trans | acuI | 3,858 |
| org\_sul\_trans | prpE | 3,719 |
| org\_sul\_trans | dmsB | 3,627 |
| org\_sul\_trans | comB | 2,832 |
| org\_sul\_trans | isfD | 2,648 |
| org\_sul\_trans | dmsC | 2,622 |
| org\_sul\_trans | tpa | 2,179 |
| org\_sul\_trans | dmdB | 1,743 |
| org\_sul\_trans | dmoA | 1,597 |
| org\_sul\_trans | sqdB | 1,093 |
| org\_sul\_trans | dmdC | 1,087 |
| org\_sul\_trans | hpsN | 958 |
| org\_sul\_trans | yihQ | 812 |
| org\_sul\_trans | sfnG | 719 |
| org\_sul\_trans | sqdX | 652 |
| org\_sul\_trans | dmdD | 489 |
| org\_sul\_trans | comE | 424 |
| org\_sul\_trans | mddA | 307 |
| org\_sul\_trans | comA | 253 |
| org\_sul\_trans | slcC | 244 |
| org\_sul\_trans | dmdA | 228 |
| org\_sul\_trans | toa | 224 |
| org\_sul\_trans | sqdD | 203 |
| org\_sul\_trans | comD | 195 |
| org\_sul\_trans | dddP | 154 |
| org\_sul\_trans | dddT | 90 |
| org\_sul\_trans | hpsP | 78 |
| org\_sul\_trans | dddL | 68 |
| org\_sul\_trans | comC | 63 |
| org\_sul\_trans | dddD | 62 |
| org\_sul\_trans | tauY | 57 |
| org\_sul\_trans | tauX | 48 |
| org\_sul\_trans | slcD | 44 |
| org\_sul\_trans | dsyB | 43 |
| org\_sul\_trans | dddQ | 33 |
| org\_sul\_trans | dddA | 24 |
| org\_sul\_trans | dddW | 24 |
| org\_sul\_trans | dddC | 19 |
| org\_sul\_trans | acuN | 18 |
| org\_sul\_trans | dddY | 17 |
| org\_sul\_trans | ddhA | 13 |
| org\_sul\_trans | dddK | 10 |
| org\_sul\_trans | ddhB | 10 |
| org\_sul\_trans | hpsO | 10 |
| org\_sul\_trans | acuK | 6 |
| org\_sul\_trans | ddhC | 6 |
| org\_sul\_trans | iseJ | 4 |
| ox\_phosphorylation | ppa | 17,049 |
| ox\_phosphorylation | ppk | 14,456 |
| oxid\_formaldehyde | frmA | 6,267 |
| oxid\_formaldehyde | fghA | 4,548 |
| oxid\_formaldehyde | fdhA-K00148 | 4,363 |
| oxid\_formaldehyde | gfa | 1,616 |
| oxid\_formaldehyde | fdm | 944 |
| oxid\_formaldehyde | frmB | 339 |
| oxid\_formaldehyde | fae | 245 |
| oxid\_formaldehyde | mdo | 217 |
| oxid\_formate | fdoG | 2,004 |
| oxid\_formate | fdhF | 1,989 |
| oxid\_formate | fdoH | 1,685 |
| oxid\_formate | fdhA | 1,308 |
| oxid\_formate | fdoI | 1,282 |
| oxid\_formate | fdsD | 767 |
| oxid\_formate | fdhB | 719 |
| oxid\_formate | fdwB | 667 |
| oxid\_formate | fdwE | 18 |
| oxid\_met\_c1 | pqqE | 6,007 |
| oxid\_met\_c1 | pqqB | 5,794 |
| oxid\_met\_c1 | pqqC | 5,124 |
| oxid\_met\_c1 | amoA | 2,905 |
| oxid\_met\_c1 | pqqD | 2,447 |
| oxid\_met\_c1 | pqqF | 1,645 |
| oxid\_met\_c1 | pqqA | 1,182 |
| oxid\_met\_c1 | mxaF | 985 |
| oxid\_met\_c1 | mgsB | 463 |
| oxid\_met\_c1 | mmoX | 443 |
| oxid\_met\_c1 | mgsA | 396 |
| oxid\_met\_c1 | mgsC | 389 |
| oxid\_met\_c1 | xoxF5 | 317 |
| oxid\_met\_c1 | mauA | 270 |
| oxid\_met\_c1 | mauC | 182 |
| oxid\_met\_c1 | mauD | 117 |
| oxid\_met\_c1 | mxaD | 115 |
| oxid\_met\_c1 | mxaC | 108 |
| oxid\_met\_c1 | mxaG | 101 |
| oxid\_met\_c1 | mxaL | 96 |
| oxid\_met\_c1 | mxaI | 94 |
| oxid\_met\_c1 | mxaK | 81 |
| oxid\_met\_c1 | mmoC | 74 |
| oxid\_met\_c1 | mgdA | 70 |
| oxid\_met\_c1 | mgdB | 70 |
| oxid\_met\_c1 | xoxF1 | 66 |
| oxid\_met\_c1 | mauE | 62 |
| oxid\_met\_c1 | mauB | 60 |
| oxid\_met\_c1 | mxaJ | 55 |
| oxid\_met\_c1 | amoB | 34 |
| oxid\_met\_c1 | xoxF4 | 33 |
| oxid\_met\_c1 | mmoD | 30 |
| oxid\_met\_c1 | mmoZ | 29 |
| oxid\_met\_c1 | mxaA | 28 |
| oxid\_met\_c1 | mmoY | 27 |
| oxid\_met\_c1 | mauF | 26 |
| oxid\_met\_c1 | mmoB | 23 |
| oxid\_met\_c1 | amoC | 22 |
| oxid\_met\_c1 | qhpA | 19 |
| oxid\_met\_c1 | dcmA | 15 |
| oxid\_met\_c1 | mgdD | 13 |
| oxid\_met\_c1 | xoxF2 | 7 |
| oxid\_met\_c1 | dcmR | 1 |
| pentose | rpiA | 16,950 |
| pentose | deoB | 11,680 |
| pentose | gnd | 7,540 |
| pentose | prsA | 6,167 |
| pentose | gntK | 4,970 |
| pentose | gcd | 1,137 |
| pentose | gnl | 495 |
| phos\_other | phoH | 5,936 |
| phos\_other | phnF | 1,017 |
| phos\_other | lysR | 423 |
| phos\_other | ptxD | 79 |
| phos\_other | phnR | 47 |
| phos\_other | htxA | 3 |
| phosph\_met | phnN | 4,641 |
| phosph\_met | phnW | 4,453 |
| phosph\_met | phnX | 3,740 |
| phosph\_met | phnK | 2,951 |
| phosph\_met | phnL | 2,671 |
| phosph\_met | phnG | 2,078 |
| phosph\_met | phnI | 1,588 |
| phosph\_met | phnH | 1,540 |
| phosph\_met | phnJ | 1,426 |
| phosph\_met | phnM | 1,359 |
| phosph\_met | phnA | 828 |
| phosph\_met | phnP | 772 |
| phosph\_met | phny | 739 |
| phosph\_met | ppd | 633 |
| phosph\_met | phnPP | 431 |
| phosph\_met | phnO | 308 |
| phosph\_met | pepM | 138 |
| phosph\_met | pbfA | 107 |
| phosph\_met | pphA | 51 |
| phosph\_met | phnZ | 49 |
| phosph\_met | fomC | 24 |
| phosph\_met | phnY | 9 |
| phosph\_met | phpC | 7 |
| phosph\_met | mpnS | 2 |
| phosphotransferase | ptsH | 5,702 |
| phosphotransferase | ptsI | 5,482 |
| purine | adk | 26,868 |
| purine | purD | 21,711 |
| purine | purC | 21,592 |
| purine | guaA | 21,026 |
| purine | purH | 20,959 |
| purine | gmk | 20,885 |
| purine | purA | 20,446 |
| purine | purE | 20,172 |
| purine | purM | 18,057 |
| purine | purF | 17,558 |
| purine | guaB | 15,957 |
| purine | purL | 15,753 |
| purine | purN | 14,640 |
| purine | purK | 13,094 |
| purine | purQ | 11,926 |
| purine | purB | 7,825 |
| purine | purS | 6,525 |
| purine | spoT | 6,267 |
| purine | purT | 5,756 |
| purine | ppx | 4,886 |
| purine | purP | 675 |
| purine | purO | 483 |
| purine | ADE2 | 417 |
| pyrimidine | tmk | 24,746 |
| pyrimidine | pyrF | 22,708 |
| pyrimidine | pyrE | 21,377 |
| pyrimidine | pyrG | 20,137 |
| pyrimidine | pyrH | 17,781 |
| pyrimidine | dut | 17,541 |
| pyrimidine | thyA | 15,875 |
| pyrimidine | dcd | 8,996 |
| pyrimidine | cmk | 5,576 |
| pyrimidine | nrdF | 4,481 |
| pyrimidine | nrdB | 3,928 |
| pyrimidine | nrdD | 3,357 |
| pyrimidine | nrdA | 2,005 |
| pyrimidine | nrdE | 1,697 |
| pyrimidine | nrdJ | 1,692 |
| pyrimidine | rtpR | 87 |
| pyruvate | pyk | 22,965 |
| pyruvate | ppdK | 5,068 |
| pyruvate | pckA | 3,167 |
| pyruvate | pckG | 2,096 |
| rump | pfkA | 21,579 |
| rump | glpX | 10,150 |
| rump | pfp | 8,854 |
| rump | fbaA | 7,719 |
| rump | fbaB | 1,301 |
| rump | hxlB | 1,031 |
| rump | hxlA | 964 |
| rump | pfkB | 623 |
| rump | fae-hps | 310 |
| rump | pfkC | 126 |
| rump | fbp3 | 21 |
| serine | glyA | 44,741 |
| serine | eno | 36,110 |
| serine | serC | 24,144 |
| serine | gpmI | 21,974 |
| serine | serB | 14,433 |
| serine | serA | 12,388 |
| serine | folA | 8,604 |
| serine | mdh-K00024 | 3,639 |
| serine | gpmB | 3,388 |
| serine | hprA | 3,343 |
| serine | mtkB | 2,848 |
| serine | mtkA | 2,086 |
| serine | thrH | 1,641 |
| serine | apgM | 1,586 |
| serine | mcl | 1,319 |
| serine | porB | 1,240 |
| serine | porD | 1,068 |
| serine | porA | 1,042 |
| serine | porG | 647 |
| serine | gck | 285 |
| serine | dfrA1 | 230 |
| serine | fchA | 116 |
| serine | psp | 24 |
| serine | dfrA12 | 12 |
| serine | dfrA10 | 1 |
| sul\_other | ssuB | 22,631 |
| sul\_other | cysA | 12,878 |
| sul\_other | tauB | 8,761 |
| sul\_other | cysU | 8,178 |
| sul\_other | sbp | 5,267 |
| sul\_other | cysZ | 5,010 |
| sul\_other | cysW | 4,802 |
| sul\_other | ssuC | 3,962 |
| sul\_other | tusA | 3,689 |
| sul\_other | ssuA | 3,601 |
| sul\_other | tusD | 3,416 |
| sul\_other | tusE | 3,119 |
| sul\_other | sulP | 3,105 |
| sul\_other | tauA | 2,457 |
| sul\_other | cysP | 1,919 |
| sul\_other | tusC | 1,576 |
| sul\_other | tauC | 1,555 |
| sul\_other | tusB | 1,486 |
| sul\_other | tauZ | 196 |
| sul\_other | hpsK | 55 |
| sul\_other | hpsL | 52 |
| sul\_other | hpsM | 50 |
| sul\_other | iseK | 50 |
| sul\_other | iseM | 50 |
| sul\_other | iseL | 35 |
| sul\_other | soxL | 32 |
| sul\_other | tauE | 29 |
| sul\_other | sgpB | 28 |
| sul\_other | sgpA | 12 |
| sul\_other | sgpC | 12 |
| sul\_other | cuyZ | 4 |
| sulfur\_dis | phsA | 698 |
| sulfur\_dis | phsC | 313 |
| sulfur\_dis | phsB | 209 |
| sulfur\_dis | sor | 27 |
| sulfur\_dis | tetH | 13 |
| sulfur\_ox | glpE | 7,777 |
| sulfur\_ox | sseA | 3,145 |
| sulfur\_ox | tsdA | 752 |
| sulfur\_ox | fccB | 611 |
| sulfur\_ox | sorA | 562 |
| sulfur\_ox | sqr | 553 |
| sulfur\_ox | soeA | 342 |
| sulfur\_ox | sorB | 238 |
| sulfur\_ox | tsdB | 238 |
| sulfur\_ox | fccA | 199 |
| sulfur\_ox | soeC | 135 |
| sulfur\_ox | soeB | 94 |
| sulfur\_ox | doxD | 16 |
| sulfur\_ox | doxA | 15 |
| sulred | ttrA | 2,276 |
| sulred | ttrB | 1,734 |
| sulred | ttrC | 909 |
| sulred | sudA | 885 |
| sulred | asrA | 715 |
| sulred | sudB | 706 |
| sulred | asrB | 704 |
| sulred | asrC | 367 |
| sulred | shyC | 215 |
| sulred | otr | 192 |
| sulred | hydD | 50 |
| sulred | rdlA | 41 |
| sulred | hydB | 38 |
| sulred | hydG | 36 |
| sulred | shyD | 35 |
| sulred | hydA | 34 |
| sulred | shyA | 29 |
| sulred | shyB | 29 |
| sulred | psrA | 28 |
| sulred | psrB | 28 |
| sulred | psrC | 28 |
| sulred | sreB | 26 |
| sulred | fsr | 23 |
| sulred | mccA | 13 |
| sulred | sreA | 11 |
| sulred | sreC | 8 |
| transporters | ugpC | 35,430 |
| transporters | pstB | 17,200 |
| transporters | pstS | 11,342 |
| transporters | pstC | 10,380 |
| transporters | pstA | 9,975 |
| transporters | phnC | 8,742 |
| transporters | ugpE | 4,729 |
| transporters | ugpA | 3,222 |
| transporters | pit | 3,184 |
| transporters | phnE | 3,175 |
| transporters | ugpB | 2,348 |
| transporters | glpT | 2,210 |
| transporters | phnD | 1,141 |
| transporters | phnU | 497 |
| transporters | phnT | 494 |
| transporters | phnS | 404 |
| transporters | phnV | 323 |
| transporters | pgtP | 290 |
| transporters | phnD\_phosphite | 265 |
| transporters | ptxC | 55 |
| transporters | aepX | 42 |
| transporters | ptxB | 33 |
| transporters | aepP | 18 |
| transporters | aepW | 15 |
| transporters | htxB | 15 |
| transporters | aepS | 14 |
| transporters | aepV | 10 |
| transporters | ptxA | 4 |
| two\_comp | phoB | 20,472 |
| two\_comp | phoP | 9,582 |
| two\_comp | phoU | 8,090 |
| two\_comp | phoR | 5,957 |
| two\_comp | RegX3 | 4,792 |
| two\_comp | SenX3 | 1,233 |
| two\_comp | pgtB | 310 |
| two\_comp | pgtA | 223 |
| two\_comp | pgtC | 137 |