**S5 Table.** Genes that mutated in *Salmonella* and *E. coli* in laboratory culturing experiments

**Note:** References are number differently here than in the body of the paper. Reference numbers here correspond to the reference list at the bottom of this document.

|  |  |  |  |
| --- | --- | --- | --- |
| **Locus Id in S. Typhimurium LT2** | **Gene Name** | **Reference** | **Background Strain** |
| STM0028 | bcfH | (1) | S. Typhimurium LT2 |
| STM0066 | carA | (1) | S. Typhimurium LT2 |
| STM0105 | yabI | (1) | S. Typhimurium LT2 |
| STM0113 | leuA  | (1) | S. Typhimurium LT2 |
| STM0122 | ftsI | (1) | S. Typhimurium LT2 |
| STM0127 | ftsW | (1,2)  | S. Typhimurium LT2; E. coli |
| STM0168 | cueO | (1) | S. Typhimurium LT2 |
| STM0172 | yadG | (2) | E. coli |
| STM0184 | pcnB | (3) | E. coli |
| STM0201 | STM0201 | (1) | S. Typhimurium LT2 |
| STM0256 | yafC | (1) | S. Typhimurium LT2 |
| STM0262 | yafS | (1) | S. Typhimurium LT2 |
| STM0319 | crl | (1) | S. Typhimurium LT2 |
| STM0320 | PhoE | (2,4) | E. coli |
| STM0364 | foxA | (1) | S. Typhimurium LT2 |
| STM0367 | prpR | (1) | S. Typhimurium LT2 |
| STM0399 | brnQ | (5) | S. Typhimurium LT2 |
| STM0475 | acrB | (6) | E. coli |
| STM0476 | acrA | (6) | E. coli |
| STM0492 | ybaL | (7) | E. coli |
| STM0523 | allB | (1) | S. Typhimurium LT2 |
| STM0543 | fimA | (2,7) | E. coli |
| STM0547 | fimH | (5) | S. Typhimurium LT2 JB124 |
| STM0549 | fimZ | (1) | S. Typhimurium LT2 |
| STM0625 | dpiB | (1) | S. Typhimurium LT2 |
| STM0627 | dcuC | (1,5)  | S. Typhimurium LT2 |
| STM0640 | mrdA | (3,7) | E. coli |
| STM0692 | STM0692 | (1) | S. Typhimurium LT2 |
| STM0716 | STM0716 | (1) | S. Typhimurium LT2 |
| STM0769 | STM0769 | (1) | S. Typhimurium LT2 |
| STM0776 | galE | (1) | S. Typhimurium LT2 |
| STM0793 | bioA | (1) | S. Typhimurium LT2 |
| STM0893 | STM0893 | (1) | S. Typhimurium LT2 |
| STM0898 | STM0898 | (1) | S. Typhimurium LT2 |
| STM0968 | ycaD | (1) | S. Typhimurium LT2 |
| STM0999 | ompF | (2,3) | E. coli |
| STM1068 | lonH | (1) | S. Typhimurium LT2 |
| STM1124 | putA | (1) | S. Typhimurium LT2 |
| STM1142 | csgD | (2,8) | E. coli |
| STM1178 | flgF | (1) | S. Typhimurium LT2 |
| STM1203 | ptsG | (2,9)  | E. coli |
| STM1221 | cobB | (2,8) | E. coli |
| STM1225 | potB | (10) | S. Typhimurium LT2 |
| STM1226 | potA | (1,10) | S. Typhimurium LT2 |
| STM1297 | selD | (1) | S. Typhimurium LT2 |
| STM1365 | ydiJ | (1) | S. Typhimurium LT2 |
| STM1378 | pykF | (7,11,12) | E. coli |
| STM1417 | ssaP | (1) | S. Typhimurium LT2 |
| STM1425 | mdtK | (1) | S. Typhimurium LT2 |
| STM1441 | STM1441 | (1) | S. Typhimurium LT2 |
| STM1469 | fumC | (1) | S. Typhimurium LT2 |
| STM1527 | STM1527 | (1) | S. Typhimurium LT2 |
| STM1559 | STM1559 | (1) | S. Typhimurium LT2 |
| STM1560 | STM1560 | (1) | S. Typhimurium LT2 |
| STM1561 | STM1561 | (1) | S. Typhimurium LT2 |
| STM1562 | STM1562 | (1) | S. Typhimurium LT2 |
| STM1563 | osmC | (1) | S. Typhimurium LT2 |
| STM1564 | bdm | (1) | S. Typhimurium LT2 |
| STM1565 | rpsV | (1) | S. Typhimurium LT2 |
| STM1566 | maeA | (1) | S. Typhimurium LT2 |
| STM1567 | adhP | (1) | S. Typhimurium LT2 |
| STM1568 | fdnI | (1) | S. Typhimurium LT2 |
| STM1569 | fdnH | (1) | S. Typhimurium LT2 |
| STM1570 | fdnG | (1,13) | S. Typhimurium LT2; E. coli |
| STM1571 | yddG | (1) | S. Typhimurium LT2 |
| STM1572 | OmpD | (1) | S. Typhimurium LT2 |
| STM1573 | STM1573 | (1) | S. Typhimurium LT2 |
| STM1574 | smvA | (1) | S. Typhimurium LT2 |
| STM1575 | STM1575 | (1) | S. Typhimurium LT2 |
| STM1576 | narU | (1) | S. Typhimurium LT2 |
| STM1577 | narZ | (1,13) | S. Typhimurium LT2; E. coli |
| STM1602 | sifB | (1) | S. Typhimurium LT2 |
| STM1624 | STM14\_1964 | (14) | S. Typhimurium 14028 strains |
| STM1702 | rnb | (1,5) | S. Typhimurium LT2 |
| STM1714 | topA | (3) | E. coli |
| STM1753 | hnr  | (5) | Salmonella Typhimurium LT2  |
| STM1760 | STM1760 | (1) | S. Typhimurium LT2 |
| STM1831 | manY | (1) | S. Typhimurium LT2 |
| STM1832 | manZ | (1) | S. Typhimurium LT2 |
| STM1833 | yobD | (1) | S. Typhimurium LT2 |
| STM1834 | mntP | (1) | S. Typhimurium LT2 |
| STM1835 | rrmA | (1) | S. Typhimurium LT2 |
| STM1836 | STM1836 | (1) | S. Typhimurium LT2 |
| STM1842 | kdgR | (10) | S. Typhimurium LT2 |
| STM1843 | STM1843 | (10) | S. Typhimurium LT2 |
| STM1844 | htpX | (10) | S. Typhimurium LT2 |
| STM1923 | motA | (5) | Salmonella Typhimurium LT2 JB124 |
| STM1924.S | flhC | (1) | S. Typhimurium LT2 |
| STM1931 | araH | (1) | S. Typhimurium LT2 |
| STM1946 | uvrC | (1,6) | S. Typhimurium LT2; E. coli |
| STM1947 | uvrY | (1) | S. Typhimurium LT2 |
| STM1949 | yecF | (1) | S. Typhimurium LT2 |
| STM1950 | sdiA | (1) | S. Typhimurium LT2 |
| STM1951 | yecC | (1) | S. Typhimurium LT2 |
| STM1952 | yecS | (1) | S. Typhimurium LT2 |
| STM1970 | fliG | (1) | S. Typhimurium LT2 |
| STM1980 | fliQ | (1) | S. Typhimurium LT2 |
| STM2024 | cbiL | (1) | S. Typhimurium LT2 |
| STM2082 | rfbP | (1) | S. Typhimurium LT2 |
| STM2087 | rfbV | (1) | S. Typhimurium LT2 |
| STM2089 | rfbJ | (14) | S. Typhimurium 14028 strains |
| STM2189 | mglA | (5) | Salmonella Typhimurium LT2 JB124 |
| STM2191 | galS | (2,13) | E. coli |
| STM2218 | yejE | (1) | S. Typhimurium LT2 |
| STM2224 | rplY | (1) | S. Typhimurium LT2 |
| STM2267 | OmpC | (1,2,4) | S. Typhimurium LT2: E. coli |
| STM2271 | rcsC | (1) | S. Typhimurium LT2 |
| STM2283 | glpT | (1) | S. Typhimurium LT2 |
| STM2287 | sseL | (1) | S. Typhimurium LT2 |
| STM2318 | nuoL | (14) | S. Typhimurium 14028 strains |
| STM2382 | yfcA | (1) | S. Typhimurium LT2 |
| STM2422 | xapA | (2) | E. coli |
| STM2476 | ypfG | (1) | S. Typhimurium LT2 |
| STM2501 | ppk | (1) | S. Typhimurium LT2 |
| STM2513 | shdA | (1) | S. Typhimurium LT2 |
| STM2514 | ratB | (1) | S. Typhimurium LT2 |
| STM2729 | STM2729 | (1) | S. Typhimurium LT2 |
| STM2772 | hin | (14) | S. Typhimurium 14028 strains |
| STM2773 | iroB | (1) | S. Typhimurium LT2 |
| STM2827 | alaS | (1) | S. Typhimurium LT2 |
| STM2831 | mltB | (1) | S. Typhimurium LT2 |
| STM2924 | rpoS | (7,15,8,14,13,6)  | S. Typhimurium 14028; E. coli |
| STM2943 | STM2943 | (1) | S. Typhimurium LT2 |
| STM2953 | pyrG | (1) | S. Typhimurium LT2 |
| STM2958 | barA | (1) | S. Typhimurium LT2 |
| STM3003 | ptsP | (1) | S. Typhimurium LT2 |
| STM3005 | mutH | (1) | S. Typhimurium LT2 |
| STM3035 | STM3035 | (1) | S. Typhimurium LT2 |
| STM3046 | ygfX | (1) | S. Typhimurium LT2 |
| STM3107 | yggN | (1) | S. Typhimurium LT2 |
| STM3110 | mutY | (2,8) | E. coli |
| STM3133 | STM3133 | (1) | S. Typhimurium LT2 |
| STM3171 | ygiK | (5) | S. Typhimurium LT2 |
| STM3174 | parC | (1) | S. Typhimurium LT2 |
| STM3184 | yqiB | (1) | S. Typhimurium LT2 |
| STM3280.S | deaD | (1) | S. Typhimurium LT2 |
| STM3286 | infB | (3) | E. coli |
| STM3330 | gltB | (7,13) | E. coli |
| STM3332 | yhcG | (1) | S. Typhimurium LT2 |
| STM3350 | STM3350 | (1) | S. Typhimurium LT2 |
| STM3385 | fis | (3) | E. coli |
| STM3401 | aroE | (1) | S. Typhimurium LT2 |
| STM3415 | rpoA | (7,13) | E. coli |
| STM3416 | rpsD | (3) | E. coli |
| STM3455 | slyD | (2) | E. coli |
| STM3493 | mrcA | (1,13) | S. Typhimurium LT2; E. coli |
| STM3499 | yhgE | (1) | S. Typhimurium LT2 |
| STM3501 | envZ | (1) | S. Typhimurium LT2 |
| STM3502 | ompR | (1) | S. Typhimurium LT2 |
| STM3513 | malQ | (5) | Salmonella Typhimurium LT2 JB124 |
| STM3514 | malP | (5) | Salmonella Typhimurium LT2 JB124 |
| STM3515 | malT | (2,3,13) | E. coli |
| STM3536 | glgC | (1) | S. Typhimurium LT2 |
| STM3633 |  | (5) | S. Typhimurium LT2 |
| STM3714 | rfaK | (1) | S. Typhimurium LT2 |
| STM3717 | rfaJ | (1) | S. Typhimurium LT2 |
| STM3724 | kdtA | (7,11) | E. coli |
| STM3734 | rph | (7) | E. coli |
| STM3738 | yigC | (1) | S. Typhimurium LT2 |
| STM3742 | spoT | (3,7,9) | E. coli |
| STM3865 | atpD | (1) | S. Typhimurium LT2 |
| STM3879 | yieN, ravA | (1) | S. Typhimurium LT2 |
| STM3881 | rbsD | (3,9,11) | E. coli |
| STM3882 | rbsA | (3,9,11) | E. coli |
| STM3883 | rbsC | (3,9–11)  | S. Typhimurium LT2; E. coli |
| STM3884 | rbsB | (3,9–11)  | S. Typhimurium LT2; E. coli |
| STM3885 | rbsK | (3,11,9,10) | S. Typhimurium LT2; E. coli |
| STM3886 | rbsR | (3,9–11,14) | S. Typhimurium 14028 strains, LT2, E. coli |
| STM3913 | gppA | (5) | Salmonella Typhimurium LT2 JB124 |
| STM3914 | rhlB | (5) | Salmonella Typhimurium LT2 JB124 |
| STM3917 | rho | (7,9) | E. coli |
| STM3939 | cyaA | (2,7) | E. coli |
| STM3942 | STM3942 | (1) | S. Typhimurium LT2 |
| STM3951 | uvrD | (1) | S. Typhimurium LT2 |
| STM4028 | yihZ, dtd | (1) | S. Typhimurium LT2 |
| STM4037 | fdoG | (1,13) | S. Typhimurium LT2; E. coli |
| STM4064 | ushB | (1) | S. Typhimurium LT2 |
| STM4067 | STM4067 | (1) | S. Typhimurium LT2 |
| STM4083 | yiiR | (1) | S. Typhimurium LT2 |
| STM4086 | glpK | (11,16) | E. coli |
| STM4087 | glpF | (1) | S. Typhimurium LT2 |
| STM4094 | cytR | (14) | S. Typhimurium 14028 strains |
| STM4153 | rpoB | (2,7) | E. coli |
| STM4154 | rpoC | (7) | E. coli |
| STM4167 | hemE | (1) | S. Typhimurium LT2 |
| STM4227 | malG | (1) | S. Typhimurium LT2 |
| STM4231 | LamB (malL) | (2,4) | E. coli |
| STM4325 | dcuA | (14) | S. Typhimurium 14028 strains |
| STM4326 | aspA | (14) | S. Typhimurium 14028 strains |
| STM4327 | fxsA | (14) | S. Typhimurium 14028 strains |
| STM4359 | mutL | (13,6) | E. coli |
| STM4361 | hfq | (7,2,17) | E. coli |
| STM4383 | ulaA | (1) | S. Typhimurium LT2 |
| STM4426 | srfJ | (1) | S. Typhimurium LT2 |
| STM4427  | STM4427  | (1) | S. Typhimurium LT2 |
| STM4445 | STM4445 | (1) | S. Typhimurium LT2 |
| STM4460 | pyrB | (1) | S. Typhimurium LT2 |
| STM4467 | arcA | (6) | E. coli |
| STM4479 | yjgP | (1) | S. Typhimurium LT2 |
| STM4489 | STM4489 | (1) | S. Typhimurium LT2 |
| STM4580.S | nadR | (3,9,11,12) | E. coli |

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