**Supplementary Table 3. RNA-seq differently expressed genes (ΔagrD/USA500)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gene id** | **Gene name** | **Description** | **log2FC** | **Pvalue** |
| USA300HOU\_RS10955 | *hld* | delta\_hemolysin | -11.96 | 0.0E+00 |
| USA300HOU\_RS05895 | *psm1* | hypothetical\_protein | -9.77 | 0.0E+00 |
| USA300HOU\_RS05900 | *psm2* | hypothetical\_protein | -9.09 | 0.0E+00 |
| USA300HOU\_RS10975 | *agrA* | DNA\_binding\_response\_regulator | -6.04 | 0.0E+00 |
| USA300HOU\_RS10970 | *agrC* | histidine\_kinase | -6.00 | 0.0E+00 |
| USA300HOU\_RS10960 | *agrB* | accessory\_gene\_regulator\_protein\_B | -5.98 | 0.0E+00 |
| USA300HOU\_RS14500 | *lip* | lipase | -4.00 | 0.0E+00 |
| USA300HOU\_RS07325 | *USA300HOU\_1370* | hypothetical\_protein | -3.07 | 3.9E-02 |
| USA300HOU\_RS08530 | *USA300HOU\_1602* | membrane\_protein | -2.81 | 5.2E-04 |
| USA300HOU\_RS01700 | *lip1* | lipase | -2.62 | 3.7E-305 |
| USA300HOU\_RS03335 | *USA300HOU\_0634* | hypothetical\_protein | -2.45 | 2.1E-04 |
| USA300HOU\_RS01005 | *USA300HOU\_0204* | hypothetical\_protein | -2.40 | 4.7E-228 |
| murQ | *USA300HOU\_0205* | N\_acetylmuramic\_acid\_6\_phosphate\_etherase | -2.39 | 1.4E-176 |
| USA300HOU\_RS01295 | *USA300HOU\_0260* | hypothetical\_protein | -2.39 | 3.9E-02 |
| USA300HOU\_RS00175 | *USA300HOU\_0034* | transposase | -2.32 | 2.7E-03 |
| USA300HOU\_RS13135 | *bioD* | ATP\_dependent\_dethiobiotin\_synthetase | -2.27 | 9.9E-04 |
| USA300HOU\_RS13065 | *USA300HOU\_2397* | hypothetical\_protein | -2.21 | 2.8E-06 |
| USA300HOU\_RS01015 | *USA300HOU\_0206* | permease | -2.08 | 9.7E-174 |
| USA300HOU\_RS01955 | *-* | integrase | -2.07 | 1.2E-02 |
| USA300HOU\_RS01020 | *USA300HOU\_0207* | RpiR\_family\_transcriptional\_regulator | -2.02 | 6.9E-154 |
| USA300HOU\_RS11740 | *USA300HOU\_2159* | multidrug\_resistance\_efflux\_pump\_SepA | -1.92 | 4.2E-10 |
| USA300HOU\_RS13845 | *USA300HOU\_2545* | ferrous\_iron\_transporter\_A | -1.88 | 6.3E-03 |
| USA300HOU\_RS02010 | *USA300HOU\_0402* | hypothetical\_protein | -1.74 | 7.1E-09 |
| USA300HOU\_RS00405 | *-* | hypothetical\_protein | -1.73 | 2.4E-04 |
| USA300HOU\_RS11930 | *USA300HOU\_2195* | MerR\_family\_transcriptional\_regulator | -1.66 | 1.9E-04 |
| USA300HOU\_RS03150 | *USA300HOU\_0597* | hypothetical\_protein | -1.66 | 3.2E-04 |
| USA300HOU\_RS03025 | *USA300HOU\_0571* | hypothetical\_protein | -1.63 | 6.3E-06 |
| USA300HOU\_RS14495 | *icaC* | poly\_beta\_1\_2C6\_N\_acetyl\_D\_glucosamine\_export\_protein | -1.60 | 4.3E-03 |
| USA300HOU\_RS03480 | *USA300HOU\_0663* | antibiotic\_ABC\_transporter\_ATP\_binding\_protein | -1.58 | 2.2E-118 |
| USA300HOU\_RS11070 | *ilvH* | acetolactate\_synthase | -1.57 | 6.6E-05 |
| USA300HOU\_RS05375 | *-* | hypothetical\_protein | -1.56 | 1.1E-15 |
| USA300HOU\_RS03610 | *sarX* | transcriptional\_regulator | -1.53 | 4.0E-18 |
| USA300HOU\_RS10480 | *USA300HOU\_1933* | membrane\_protein | -1.45 | 1.0E-11 |
| USA300HOU\_RS10490 | *pmtR* | membrane\_protein | -1.42 | 1.3E-08 |
| USA300HOU\_RS02080 | *USA300HOU\_0416* | mRNA\_interferase\_PemK | -1.39 | 1.8E-02 |
| USA300HOU\_RS14645 | *USA300HOU\_2702* | membrane\_protein | -1.39 | 8.2E-72 |
| USA300HOU\_RS04100 | *USA300HOU\_0785* | hypothetical\_protein | -1.33 | 4.5E-04 |
| USA300HOU\_RS00655 | *USA300HOU\_0136* | hypothetical\_protein | -1.33 | 2.6E-02 |
| USA300HOU\_RS14135 | *USA300HOU\_2601* | membrane\_protein | -1.32 | 1.5E-06 |
| USA300HOU\_RS03400 | *mnhE1* | cation\_proton\_antiporter | -1.31 | 5.3E-16 |
| USA300HOU\_RS00605 | *USA300HOU\_0127* | siderophore\_biosynthesis\_protein\_SbnA | -1.25 | 7.3E-03 |
| USA300HOU\_RS12790 | *USA300HOU\_2346* | LytTR\_family\_transcriptional\_regulator | -1.23 | 1.3E-07 |
| USA300HOU\_RS05145 | *-* | hypothetical\_protein | -1.22 | 4.8E-08 |
| USA300HOU\_RS12245 | *-* | membrane\_protein | -1.22 | 3.0E-04 |
| USA300HOU\_RS04000 | *USA300HOU\_0766* | hypothetical\_protein | -1.20 | 4.3E-02 |
| USA300HOU\_RS06980 | *trpF* | phosphoribosylanthranilate\_isomerase | -1.20 | 4.3E-02 |
| USA300HOU\_RS01555 | *USA300HOU\_0311* | membrane\_protein | -1.17 | 2.6E-03 |
| USA300HOU\_RS03140 | *USA300HOU\_0595* | hypothetical\_protein | -1.15 | 1.0E-02 |
| USA300HOU\_RS04315 | *-* | hypothetical\_protein | -1.12 | 2.9E-02 |
| USA300HOU\_RS03275 | *sarA* | transcriptional\_regulator | -1.12 | 8.0E-52 |
| USA300HOU\_RS08645 | *USA300HOU\_1624* | hypothetical\_protein | -1.09 | 7.6E-43 |
| USA300HOU\_RS11955 | *USA300HOU\_2200* | toxin | -1.07 | 1.2E-48 |
| USA300HOU\_RS13380 | *USA300HOU\_2459* | hypothetical\_protein | -1.07 | 4.9E-03 |
| USA300HOU\_RS09505 | *USA300HOU\_1779* | transposase | -1.07 | 4.0E-02 |
| USA300HOU\_RS01610 | *USA300HOU\_0322* | hypothetical\_protein | -1.05 | 1.2E-06 |
| USA300HOU\_RS06695 | *USA300HOU\_1261* | hypothetical\_protein | -1.05 | 1.0E-03 |
| USA300HOU\_RS04505 | *USA300HOU\_0868* | hypothetical\_protein | -1.03 | 1.1E-54 |
| USA300HOU\_RS01750 | *USA300HOU\_0350* | PTS\_ascorbate\_transporter\_subunit\_IIC | -1.03 | 2.1E-38 |
| USA300HOU\_RS10850 | *USA300HOU\_2007* | hypothetical\_protein | -1.02 | 3.2E-06 |
| USA300HOU\_RS12625 | *fosB* | metallothiol\_transferase\_FosB | -1.02 | 4.6E-02 |
| USA300HOU\_RS03125 | *USA300HOU\_0592* | hypothetical\_protein | -1.02 | 3.2E-03 |
| USA300HOU\_RS10500 | *pmtB* | GntR\_family\_transcriptional\_regulator | -1.01 | 1.9E-28 |
| USA300HOU\_RS10530 | *hlb1* | phospholipase | -1.01 | 9.8E-05 |
| USA300HOU\_RS12535 | *USA300HOU\_2298* | RpiR\_family\_transcriptional\_regulator | -1.00 | 1.4E-38 |
| USA300HOU\_RS05775 | *USA300HOU\_1090* | fibrinogen\_binding\_protein | 1.02 | 2.5E-38 |
| USA300HOU\_RS07970 | *USA300HOU\_1492* | hypothetical\_protein | 1.05 | 1.0E-07 |
| USA300HOU\_RS13925 | *USA300HOU\_2561* | CHAP\_domain\_containing\_protein | 1.12 | 9.5E-14 |
| USA300HOU\_RS07065 | *pstC* | phosphate\_ABC\_transporter\_permease | 1.14 | 3.9E-15 |
| USA300HOU\_RS05865 | *arcC2* | carbamate\_kinase\_1 | 1.22 | 1.2E-66 |
| USA300HOU\_RS06595 | *USA300HOU\_1241* | XRE\_family\_transcriptional\_regulator | 1.32 | 2.5E-02 |
| USA300HOU\_RS01665 | *USA300HOU\_0333* | pyrimidine\_nucleoside\_transporter\_NupC | 1.36 | 6.9E-33 |
| USA300HOU\_RS05860 | *arcB2* | ornithine\_carbamoyltransferase | 1.59 | 1.0E-104 |
| USA300HOU\_RS01660 | *USA300HOU\_0332* | pseudouridine\_5\_phosphate\_glycosidase | 1.72 | 2.1E-44 |
| USA300HOU\_RS09365 | *USA300HOU\_1754* | transporter | 1.77 | 2.3E-03 |
| USA300HOU\_RS04855 | *USA300HOU\_0938* | membrane\_protein | 1.80 | 4.0E-03 |
| USA300HOU\_RS01655 | *USA300HOU\_0331* | carbohydrate\_kinase | 1.89 | 3.5E-44 |
| USA300HOU\_RS00185 | *nanK* | ManNAc kinase | 3.10 | 4.3E-04 |
| USA300HOU\_RS10060 | *USA300HOU\_t0049* | - | 3.25 | 1.2E-02 |