

Table S6 : *Bacillus subtilis* PTA-271 encoding genes for lactonases, β -lactamases, deaminases, deacetylases

| Locus tag ID | Gene | Function |
|--------------------------------------|------------------------|---|
| <i>lactone hydrolase</i> | | |
| S19-40_01709 | ahlD, aiiA, attM, blcC | N-acyl homoserine lactone hydrolase |
| S19-40_02014 | - | Dienelactone hydrolase family protein |
| S19-40_02855 | ahlD, aiiA, attM, blcC | N-acyl homoserine lactone hydrolase |
| S19-40_03601 | - | Dienelactone hydrolase family protein |
| <i>β-lactamases</i> | | |
| S19-40_00019 | penP | Beta-lactamase |
| S19-40_00225 | - | Beta-lactamase |
| S19-40_00240 | - | Metallo-beta-lactamase superfamily protein |
| S19-40_00467 | - | Metallo-beta-lactamase superfamily protein |
| S19-40_00991 | - | Beta-lactamase |
| S19-40_01661 | - | Beta-lactamase superfamily domain protein |
| S19-40_01709 | - | Metallo-beta-lactamase superfamily protein |
| S19-40_02214 | ybxI | putative beta-lactamase YbxI |
| S19-40_02259 | - | Beta-lactamase |
| S19-40_02532 | - | Beta-lactamase superfamily domain protein |
| S19-40_02855 | - | Metallo-beta-lactamase superfamily protein |
| S19-40_02861 | - | Beta-lactamase superfamily domain protein |
| S19-40_02961 | - | Metallo-beta-lactamase superfamily protein |
| S19-40_03257 | - | Metallo-beta-lactamase superfamily protein |
| S19-40_03550 | bla2, blm, ccrA, blaB | metallo-beta-lactamase class B |
| S19-40_03707 | - | Metallo-beta-lactamase superfamily protein |
| S19-40_03742 | bla2, blm, ccrA, blaB | metallo-beta-lactamase class B |
| <i>deaminases</i> | | |
| S19-40_00468 | adeC | Adenine deaminase |
| S19-40_00611 | guaD | Guanine deaminase |
| S19-40_00930 | nagB | Glucosamine-6-phosphate deaminase 1 |
| S19-40_01533 | hemC | Porphobilinogen deaminase |
| S19-40_01675 | mtaD | 5-methylthioadenosine/S-adenosylhomocysteine deaminase |
| S19-40_02187 | nagB | Glucosamine-6-phosphate deaminase 1 |
| S19-40_02802 | tadA | tRNA-specific adenosine deaminase |
| S19-40_03012 | cdd | Cytidine deaminase |
| S19-40_03042 | tadA | tRNA-specific adenosine deaminase |
| S19-40_03150 | yerA | Putative adenine deaminase YerA |
| S19-40_03978 | yabJ | 2-iminobutanoate/2-iminopropanoate deaminase |
| S19-40_04015 | tadA | tRNA-specific adenosine deaminase |
| <i>deacetylases</i> | | |
| S19-40_00248 | pdaA | Peptidoglycan-N-acetylmuramic acid deacetylase PdaA |
| S19-40_00383 | argE | Acetylornithine deacetylase |
| S19-40_00501 | ykuR | N-acetyl diaminopimelate deacetylase |
| S19-40_00931 | nagA | N-acetylglucosamine-6-phosphate deacetylase |
| S19-40_01649 | - | N-acetyl diaminopimelate deacetylase |
| S19-40_01692 | - | Histone deacetylase domain protein |
| S19-40_02104 | cah | Cephalosporin-C deacetylase |
| S19-40_02121 | - | N-acetyl diaminopimelate deacetylase |
| S19-40_02333 | pdaC | Peptidoglycan-N-acetylmuramic acid deacetylase PdaC |
| S19-40_02535 | lysK | N-acetyl-lysine deacetylase |
| S19-40_02547 | - | N-acetyl diaminopimelate deacetylase |
| S19-40_02585 | pgdA | Peptidoglycan-N-acetylglucosamine deacetylase |
| S19-40_02586 | cobB | NAD-dependent protein deacetylase |
| S19-40_02720 | bshB1 | N-acetyl-alpha-D-glucosaminyl L-malate deacetylase 1 |
| S19-40_02857 | argE | acetylornithine deacetylase |
| S19-40_03287 | pdaA | Peptidoglycan-N-acetylmuramic acid deacetylase PdaA |
| S19-40_03411 | icaB | Poly-beta-1,6-N-acetyl-D-glucosamine N-deacetylase |
| S19-40_03591 | bshB2 | putative N-acetyl-alpha-D-glucosaminyl L-malate deacetylase 2 |
| S19-40_03620 | argE | Acetylornithine deacetylase |
| S19-40_03852 | - | N-acetyl diaminopimelate deacetylase |
| S19-40_03867 | pdaA | Peptidoglycan-N-acetylmuramic acid deacetylase PdaA |
| <i>other deacetylases</i> | | |
| S19-40_02720 | - | GlcNAc-PI de-N-acetylase |
| S19-40_03287 | - | spore_pdaA: delta-lactam-biosynthetic de-N-acetylase |
| S19-40_03591 | - | GlcNAc-PI de-N-acetylase |
| S19-40_02720 | - | GlcNAc-PI de-N-acetylase |
| S19-40_03287 | - | spore_pdaA: delta-lactam-biosynthetic de-N-acetylase |
| S19-40_03591 | - | GlcNAc-PI de-N-acetylase |
| S19-40_03824 | mmsA, iolA, ALDH6A1 | malonate-semialdehyde dehydrogenase (acetylating) / methylmalonate-semialdehyde dehydrogenase |
| <i>other (de)acylases</i> | | |

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| S19-40_00208 | fabD | Malonyl CoA-acyl carrier protein transacylase |
| S19-40_00210 | pksC | Polyketide biosynthesis malonyl CoA-acyl carrier protein transacylase PksC |
| S19-40_00328 | fabD | Malonyl CoA-acyl carrier protein transacylase |
| S19-40_01475 | dtd | D-aminoacyl-tRNA deacylase |
| S19-40_02338 | ybaK | Cys-tRNA(Pro)/Cys-tRNA(Cys) deacylase YbaK |
| S19-40_02881 | DBT, bkdB | 2-oxovalerate dehydrogenase E2 component (dihydrolipoyl transacylase) |
| S19-40_03846 | - | Penicillin acylase |
