

## SUPPLEMENTAL MATERIAL

**Supp. Table 1.** Nucleotide changes in *H. pylori* P12 mutants resistant to EZA (MutE).

| Position <sup>a</sup>   | Type         | Reference | Allele | Locus tag     | Amino acid substitution | Gene product  |
|---|--------------|-----------|--------|---------------|-------------------------|---|
| <b><i>Helicobacter pylori</i> P12 EZA resistant mutant (MutE)</b> |              |           |        |               |                         |   |
| <b>Gene class: uptake and secretion</b>                           |              |           |        |               |                         |   |
| 188841  | Substitution | G         | A      | HPP12_RS00955 | Glu97Lys                | ABC transporter   |
| 312800  | Substitution | G         | T      | HPP12_RS01540 | Asp56Tyr                | peptide ABC transporter substrate binding protein       |
| 481497  | Substitution | C         | A      | HPP12_RS02375 | Gly252Val               | VirB10 homologue  |
| 619184  | Deletion     | T         | -      | HPP12_RS03025 | Ile210fs <sup>b</sup>   | flagellar export apparatus protein FliO                 |
| 785938  | Substitution | T         | C      | HPP12_RS03725 | Val152Ala               | C4 dicarboxylate ABC transporter                        |
| 1543269   | Substitution | C         | A      | HPP12_RS07490 | Met198Ile               | multidrug resistance efflux pump                        |
| <b>Gene class: cell wall synthesis</b>                            |              |           |        |               |                         |   |
| 1089242   | Substitution | C         | T      | HPP12_RS05185 | Ala195Val               | 4-hydroxy-3-methylbut-2-enyl diphosphate reductase LytB |
| 1275277   | Substitution | C         | T      | HPP12_RS06100 | Glu173Lys               | undecaprenol pyrophosphate synthase UppS                |
| <b>Gene class: regulation</b>                                     |              |           |        |               |                         |   |
| 509798  | Deletion     | A         | -      | HPP12_RS02505 | Lys303fs                | DNA methyltransferase                                   |
| 1573194   | Substitution | T         | C      | HPP12_RS07625 | Cys29Arg                | transcription termination factor NusA                   |
| <b>Gene class: stress response</b>                                |              |           |        |               |                         |   |
| 1101805   | Substitution | G         | T      | HPP12_RS05240 | Val63Leu                | superoxide dismutase                                    |
| <b>Gene class: unknown</b>  |              |           |        |               |                         |   |
| 294838  | Deletion     | A         | -      | HPP12_RS01490 | Gln113fs                | inner membrane protein                                  |

<sup>a</sup>Nucleotide positions are indicated with reference to the published *H. pylori* P12 genome.

<sup>b</sup>fs, frameshift mutation