**Table S1**. Mutation frequencies of laboratory adapted evolution of novobiocin in Staphylococcus aureus resistant strains.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Gene | Protein Encoded | Mutation type | Frequency(mutated clones/all clones) | SNP \* | Amino Acid Change |
| gyrB | DNA gyrase subunit B | nonsynonymous | 12/12 | C431T | R144L |
| ptoB | Putative ABC transport system permease protein | stopgain | 5/12 | T42A | Y14X |
| fpgS | folylpolyglutamate synthase | nonsynonymous | 2/12 | G646A | V216L |