**Table S6. Primers of genes knocked out.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Target gene | Primer sequence | Primer length (bases) | GC content (%) | Melt temp (°C) |
| *mfs* | ATGGCACGTCGACGATATAGACCACCT  TATGGCTGAATTCGCACCTAAAGGGCG | 27  27 | 51.9  51.9 | 70.0  73.7 |
| *pnao* | GAGTCGACATCCCATATCCACTTTAGC  GCGAATTCTGCCTGTAACGAATACTAC | 27  27 | 48.1  44.4 | 65.8  64.4 |
| *nicA2* | CGGAATTCTGTAGTGAGTTTCAGTGTC  TAGTCGACGTGTAGTGGAAGATCCACT | 27  27 | 44.4  48.1 | 62.9  64.8 |
| *nicA1* | GTCAGAATTCACTCCGCCTGCGTATCAAG | 25 | 52.0 | 67.8 |
|  | CAATGTCGACACTCACCCACTACGCTTCTG | 25 | 56.0 | 67.6 |