**Supplementary File 7.** Inserts of GFP fusion plasmids.

Nucleotide sequences of upstream ORF fused with FLAG, intergenic region, and downstream ORF fused with GFP are indicated in blue, black, and red, respectively. The mutated nucleotides in the GlnZ target region are highlighted in magenta. The deleted nucleotides in *sucA* reporter constructs are highlighted in gray. NsiI and NheI sites used for cloning are highlighted in bold in cyan and green, respectively.

|  |  |
| --- | --- |
| **GFP fusion**  | **Insert**  |
| *sdhC-sucAsal* | ATGCATgcattcagcgtattccgctgtcacagcattatgaactgcgtcagtgtatgtcctaagggactgaacccgacgcgcgctatcggccatattaagtcgatgctgttgcagcgtagcgcataagtagttgtagtggttgccggatggcgacgtacagtcttatccggcctacaggcgcaaccccgtaggcctgataagcgcagcgccatcaggcaatagaagtgcaggaaacctctaaaaactgccatatgattagtaataatcgagatgttcagagcgagacaaggcgcggtctgaacgaatcttcgggagcatagttaactatgtgaccggagtgagcgaaggccgcaacgcagtcgtagcctgaacagcgaagattattagacagtttttaaaggttccttagcggacgcagatgacacgacagtccgcaacaagtgaaccccggcacgcatacagcgtatgcgtggttagtatccacggcgaaatactcgtcatagttcacgttgcatgtgcgttggctgcacttgctcaccccggtcacttactggatgtaagctcccagggattcgcaagcttgccgccttcctgaaacgtgacctatttagagtattaaataagcagaaaagatgcttaagggatcacgatgcagaacagcgctttgaaagcctggttggctagc |
| *sdhC-sucAeco* | ATGCATgcattcagcgtattccgctgtcacagcatcatgaactgcgtcagtgtatgtccgaaggggctgaacccgacgcgcgccatcggccatatcaagtcgatgttgttgcaacgtaatgcgtaaaccgtaggcctgataagacgcgcaagcgtcgcatcaggcaaccagtgccggatgcggcgtgaacgccttatccggcctacaagtcattacccgtaggcctgataagcgcagcgcatcaggcgtaacaaagaaatgcaggaaatctttaaaaactgcccctgacactaagacagtttttaaaggttccttcgcgagccactacgtagacaagagctcgcaagtgaaccccggcacgcacatcactgtgcgtggtagtatccacggcgaagtaagcataaaaaagatgcttaagggatcacgatgcagaacagcgctttgaaagcctggttggctagc |
| *deoBDsal* | ATGCATccgatggactacggtaaaaacatgctgtgatacctgttgtctttcgcgctgtagatgcgttgacttcattcgctcaccccggtcacatagttaatctatgctcccggggattcacgaattcgtcgccttcctacaacgcgaaatacttagggtatttcactgttttgacacacgttttgtaggcctgataaggcgtagccgccatcaggcaataacaacaaatttaaagggaactgaagatggcaactccacatattaatgcagaaatgggtgatttcgctgacgtcgtattgatgccggctagc |
| *glnHPsal* | ATGCATaacgaaatctacaaaaaatggttcggtacagaacctaaataaaacgacctgatgttggcttgtggcccggtagtgaggacgctcaccgggcctacagctctttccgtgacggataagacactttccgccatttccgcgccggatagagcatttgactatttacaccacggtaacaggaacgacatatgcagtttgactgggctagc |
| *pdhR-aceEsal* | ATGCATgagatgctgccgctggtgagtacgcatcgcacccgtatatttgaagccattatggccggaaaaccagaagaagcgcgtgaagcgtcacaccgacatctggcgtttatcgaagagattatgctggacagaagccgtgaggagagccgtcgtgaacgcgctttacgccgcctggaacagcgcaagaattagttttttctggcagaacgttaaccagaagatgttgtgaataacgcgcaaaaatgtgcgcggcaactaaacgcagaacctgtcttattaagctttctcacgaaagtttaatgggacaggttccagataactcaacgtattagatagataaggaatacccccatgtcagaacgtttccaaaatgacgtggatccgatcgaaactcgcgactggctacaggcgatcgaatcggtcatccgtgaagaaggtgttgctagc |
| *pdhR-aceEeco* | ATGCATgagatgctgccgctggtgagtagtcaccgcacccgcatatttgaagcgattatggccggtaagccggaagaagcgcgcgaagcatcgcatcgccatctggcctttatcgaagaaattttgctcgacagaagtcgtgaagagagccgccgtgagcgttctctgcgtcgtctggagcaacgaaagaattagtgatttttctggtaaaaattatccagaagatgttgtaaatcaagcgcatataaaagcgcggcaactaaacgtagaacctgtcttattgagctttccggcgagagttcaatgggacaggttccagaaaactcaacgttattagatagataaggaataacccatgtcagaacgtttcccaaatgacgtggatccgatcgaaactcgcgactggctccaggcgatcgaatcggtcatccgtgaagaaggtgttgctagc |
| *sdhC-sucAsal* Δ15 | ATGCATgcattcagcgtattccgctgtcacagcattatgaactgcgtcagtgtatgtcctaagggactgaacccgacgcgcgctatcggccatattaagtcgatgctgttgcagcgtagcgcataagtagttgtagtggttgccggatggcgacgtacagtcttatccggcctacaggcgcaaccccgtaggcctgataagcgcagcgccatcaggcaatagaagtgcaggaaacctctaaaaactgccatatgattagtaataatcgagatgttcagagcgagacaaggcgcggtctgaacgaatcttcgggagcatagttaactatgtgaccggagtgagcgaaggccgcaacgcagtcgtagcctgaacagcgaagattattagacagtttttaaaggttccttagcggacgcagatgacacgacagtccgcaacaagtgaaccccggcacgcatacagcgtatgcgtggttagtatccacggcgaaatactcgtcatagttcacgttgcatgtgcgttggctgcacttgctcaccccggtcacttactggatgtaagctcccagggattcgcaagcttgccgccttcctgaaacgtgacctatttagagtattaaataagcagaaaagatgcttaagggatcacgatgcagaacagcgctttgaaagcctggttggctagc |
| *sdhC-sucAsal* Δ127 | ATGCATgcattcagcgtattccgctgtcacagcattatgaactgcgtcagtgtatgtcctaagggactgaacccgacgcgcgctatcggccatattaagtcgatgctgttgcagcgtagcgcataagtagttgtagtggttgccggatggcgacgtacagtcttatccggcctacaggcgcaaccccgtaggcctgataagcgcagcgccatcaggcaatagaagtgcaggaaacctctaaaaactgccatatgattagtaataatcgagatgttcagagcgagacaaggcgcggtctgaacgaatcttcgggagcatagttaactatgtgaccggagtgagcgaaggccgcaacgcagtcgtagcctgaacagcgaagattattagacagtttttaaaggttccttagcggacgcagatgacacgacagtccgcaacaagtgaaccccggcacgcatacagcgtatgcgtggttagtatccacggcgaaatactcgtcatagttcacgttgcatgtgcgttggctgcacttgctcaccccggtcacttactggatgtaagctcccagggattcgcaagcttgccgccttcctgaaacgtgacctatttagagtattaaataagcagaaaagatgcttaagggatcacgatgcagaacagcgctttgaaagcctggttggctagc |
| *sdhC-sucAsal* Δ142 | ATGCATgcattcagcgtattccgctgtcacagcattatgaactgcgtcagtgtatgtcctaagggactgaacccgacgcgcgctatcggccatattaagtcgatgctgttgcagcgtagcgcataagtagttgtagtggttgccggatggcgacgtacagtcttatccggcctacaggcgcaaccccgtaggcctgataagcgcagcgccatcaggcaatagaagtgcaggaaacctctaaaaactgccatatgattagtaataatcgagatgttcagagcgagacaaggcgcggtctgaacgaatcttcgggagcatagttaactatgtgaccggagtgagcgaaggccgcaacgcagtcgtagcctgaacagcgaagattattagacagtttttaaaggttccttagcggacgcagatgacacgacagtccgcaacaagtgaaccccggcacgcatacagcgtatgcgtggttagtatccacggcgaaatactcgtcatagttcacgttgcatgtgcgttggctgcacttgctcaccccggtcacttactggatgtaagctcccagggattcgcaagcttgccgccttcctgaaacgtgacctatttagagtattaaataagcagaaaagatgcttaagggatcacgatgcagaacagcgctttgaaagcctggttggctagc |
| *sdhC-sucAeco* Δ15 | ATGCATgcattcagcgtattccgctgtcacagcatcatgaactgcgtcagtgtatgtccgaaggggctgaacccgacgcgcgccatcggccatatcaagtcgatgttgttgcaacgtaatgcgtaaaccgtaggcctgataagacgcgcaagcgtcgcatcaggcaaccagtgccggatgcggcgtgaacgccttatccggcctacaagtcattacccgtaggcctgataagcgcagcgcatcaggcgtaacaaagaaatgcaggaaatctttaaaaactgcccctgacactaagacagtttttaaaggttccttcgcgagccactacgtagacaagagctcgcaagtgaaccccggcacgcacatcactgtgcgtggtagtatccacggcgaagtaagcataaaaaagatgcttaagggatcacgatgcagaacagcgctttgaaagcctggttggctagc |