**Supplementary table 1. Oligonucleotides used in this study**

| Oligonucleotide | Sequence (5'-3') | Use in this work |
|---|---|---|
| CbiA_K153A FWD | CACAACCACTTTAAGTCAAGCAAAGGAACGAG CACTAGAATA | Generation of CbiA harboring single amino acid substitutions K153A |
| CbiA_K153A REV | GACGCTTTATATATTCTAGTGCTCGTTCCTTTG CTTGACTTAAAG | Generation of CbiA harboring single amino acid substitutions K153A |
| CbiA_K154A FWD | CACAACCACTTTAAGTCAAAAAGCGGAACGAG CACTAGAATA | Generation of CbiA harboring single amino acid substitutions K154A |
| CbiA_K154A REV | GACGCTTTATATATTCTAGTGCTCGTTCCGCTT TTTGACTTAAAG | Generation of CbiA harboring single amino acid substitutions K154A |
| CbiA_K162A FWD | CGAGCACTAGAATATATAGCGCGTCAATTATA CATTG | Generation of CbiA harboring amino acid substitutions K162A and K154A-K162A |
| CbiA_K162A REV | GGAAATAAAATTCAATGTATAATTGACGCGCT ATATATTC | Generation of CbiA harboring amino acid substitutions K162A and K154A-K162A |
| CbiA_K188A FWD | CTTCCAAAGAACAATAGCACTTTTAGAAACTC AAAG | Generation of CbiA harboring amino acid substitutions K188A and K154A-K162A-K188A |
| CbiA_K188A REV | CAAAAATTAACTTTGAGTTTCTAAAAGTGCTAT TGTTC | Generation of CbiA harboring amino acid substitutions K188A and K154A-K162A-K188A |
| CbiA_K153A/ K154A FWD | CACAACCACTTTAAGTCAAGCAGCGGAACGAG CACTAGAATA | Generation of CbiA harboring amino acid substitutions K153A- K154A-K162A-K188A |
| CbiA_K153A/ K154A REV | GCGCTATATATTCTAGTGCTCGTTCCGCTGCTT GACTTAAAGTG | Generation of CbiA harboring amino acid substitutions K153A- K154A-K162A-K188A |
| CbiA_R145A FWD | CTTTTCATCATCAAATTTTGCAGACACAACCAC TTTAAG | Generation of CbiA harboring single amino acid substitutions R145A |
| CbiA_R145A REV | CCTTTTTTTGACTTAAAGTGGTTGTGTCTGCAA AATTTGATG | Generation of CbiA harboring single amino acid substitutions R145A |
| CbiA_R156A FWD | CTTTAAGTCAAAAAAAGGAAGCAGCACTAGAA TATATAAAG | Generation of CbiA harboring single amino acid substitutions R156A |
| CbiA_R156A REV | GACGCTTTATATATTCTAGTGCTGCTTCCTTTTT TTGAC | Generation of CbiA harboring single amino acid substitutions R156A |
| CbiA_R163A FWD | CACTAGAATATATAAAGGCACAATTATACATT GAA | Generation of CbiA harboring single amino acid substitutions R163A |
| CbiA_R163A REV | GGAAATAAAATTCAATGTATAATTGTGCCTTT ATATATTC | Generation of CbiA harboring single amino acid substitutions R163A |
| CbiA_R185A FWD | CAGAATTTTTCTTCCAAGCAACAATAAAACTTT TAG | Generation of CbiA harboring single amino acid substitutions R185A |
| CbiA_R185A REV | GAGTTTCTAAAAGTTTTATTGTTGCTTGGAAGA AAAAT | Generation of CbiA harboring single amino acid substitutions R185A |
| flaB Fw_PBi | TTCAATCAGGTAACGGTACA | qRT-PCR |
| flaB Rv_PBi | GAAGCTTGAGATCCTGAAAG | qRT-PCR |
| pQE-FP-30 | TTGCTTTGTGAGCGGATAAC | Sequencing |
| pQE-RP | CTGAGGTCATTACTGGATCTATC | Sequencing |