

Table S3. Primers used in this study.

Primer	Name	Sequence
1278	5' NdeI <i>gerS</i> truncation	AGCC <u>CATATG</u> CAAAAACGACAGTCCAC
1458	5' NdeI <i>pdaA</i> start	ATAC <u>CATATG</u> AAAAAAGATAGCCTAAAAAATACATTATGATAGG
1459	3' XhoI <i>pdaA</i> no stop	AAT <u>CTCGAG</u> TTTTTTATTATTTAAATAATCAAGTGTTTAAGTTTATAACCTTC
1505	5' NcoI <i>cspB</i> codon opt	ATAC <u>CCATGG</u> CTATTATCATTAAATTACGAACTGATTGTGAAGTAC
1507	5' linker <i>cspA</i> SOE	GACGAGGAAAAATAGCTACAAGTTTATCGATGGATACAACATTCAGATTCATAACGATC
1508	3' XhoI <i>cspA</i> codon opt no stop	AAT <u>CTCGAG</u> GGCGCAGTACATCAAACATGCCACG
1529	3' HindIII <i>cspBA</i> CO 2439	TTTGAAGCTTTTATTAATGCTGCGATAGCC
1530	5' HindIII <i>cspBA</i> linker 2482	TAAAAGCTTCAAAGACGAGGAAAAATAGCTACAAGTTTATCGATGGA
1625	3' XhoI <i>cspBA</i> codon opt with stop	AAT <u>CTCGAG</u> TTAGCGCAGTACATCAAACATGCCACG
1900	3' XhoI <i>gerS</i> +TAA	AAT <u>CTCGAG</u> TTAGTTTCTGTATTCAAATCTTTGTATTTTAC
2003	5' <i>gerS</i> flank	GCTTAGTTGTGTAGTATAAT
2004	3' <i>gerS</i> flank	GTATAACCTCATCTCCA
2005	5' SOE Δ <i>gerS</i>	GACCATAGTATGTATTATGTTCTTGGCAGTAAAATACAAAGATTTTGAATACAGAAAC
2006	3' rev oes Δ <i>gerS</i>	GTTTCTGTATTCAAATCTTTGTATTTTACTGCCAAGAACATAATACATACTATGGTC
2007	5' AscI Δ <i>gerS</i> Gibson	GTCAATTGTTCAAAAAAATAATGGCG <u>GCGCGC</u> GCTTAGTTGTGTAGTATAATA
2008	3' SbfI Δ <i>gerS</i> Gibson	AGCAAGGCAAGACCGATCGGGCC <u>CTGCAGG</u> CTTTGTCAATTCTAACCA
2181	5' NotI <i>gerS</i>	GGAATTAGGGATGTAATAA <u>GCGGCCG</u> CCAGTTGTAGATTCAGAGAATAGAGTTG
2182	3' XhoI CD3464 Gibson	GCCAAGCTTGCATGTCTGCAGGC <u>CTCGAG</u> TTAGTTTCTGTATTCAAATCTTTGTATTTT
2362	5' NotI <i>cwID</i> 263	GGAATTAGGGATGTAATAA <u>GCGGCCG</u> CATAAGGTTATATATTTTAAAGATATTATTTAAC
2387	5' <i>cwID</i> flank 850	GCTAGAGTAAGACTAGTTGCAGGTG
2388	3' <i>cwID</i> flank 861	GCTAGAGTAAGACTAGTTGCAGGTG
2389	5' AscI Δ <i>cwID</i> YN3	GTCAATTGTTCAAAAAAATGGC <u>GCGCGCC</u> GACATTAATAAGAGATGTTAAACAACC
2390	5' Δ <i>cwID</i> SOE	GCAATGATATGTCTAGTAGTATCCGAGTGAAACTCTTAACTGATGAAACA
2391	3' Δ <i>cwID</i> rev eos	TGTTTCATCAGTTAAGAGTTTACACTCGGATACTACTACTAGACATATCATTGC
2392	3' SbfI Δ <i>cwID</i> YN3	AGCAAGGCAAGACCGATCGGGCC <u>CTGCAGG</u> TCATTATCTTCCCTTGAGGACAGAG
2408	3' XhoI <i>gerS-Δlr2</i>	CAAGCTTGCATGTCTGCAGGC <u>CTCGAG</u> TTATTTTAGCAAATAACTGTTTATTTG
2428	5' <i>pdaA</i> flank 800	GCTCCATTCCCATGTTGGAAG
2429	3' <i>pdaA</i> flank 879	CATAGAAGGAGGATATCTGCTTG
2430	5' AscI Δ <i>pdaA</i> YN3 Gibson	GTCAATTGTTCAAAAAAATAATGGC <u>GCGCGCC</u> CTCAATGGCTCCAAAGTAGTTTTTTC
2431	5' Δ <i>pdaA</i> SOE	GCTCTAATACTTTTTGGAATTGCTAGGATGAGGTTCTTACACATTGGG
2432	3' Δ <i>pdaA</i> rev eos	CCCAATGTGTAAGAACCTCATCCTAGCAATTCCAAAAAGTATTAGAGC
2433	3' SbfI Δ <i>pdaA</i> YN3 Gibson	GCAAGGCAAGACCGATCGGGCC <u>CTGCAGG</u> GAAATTTTGGCAATATGTATCACATGAAG
2450	3' XhoI <i>cwID</i> YN1C	CAAGCTTGCATGTCTGCAGGC <u>CTCGAG</u> TCAACTTAAATATTTTGTATTCCCTATGTAG
2451	5' NotI <i>pdaA</i> YN1C	CAAGGAATTAGGGATGTAATAA <u>GCGGCCG</u> CCAGCCTAACTTATTTACAATCATTCTC
2455	5' Δ <i>cwID</i> internal colony PCR	GAGCTTATAGAATCAAGTGGTGGCC
2457	3' XhoI <i>pdaA</i> YN1C	CAAGCTTGCATGTCTGCAGGC <u>CTCGAG</u> GGATACAAAGAGATAAATGAATGGAC
2498	5' Δ <i>pdaA</i> internal colony PCR	CATCCATCAATGGCAGGTATTAC
2545	5' <i>cwID</i> $_{\Delta 25aa}$ His ₆ pET22b	GTTTAACTTTAAGAAGGAGATATAC <u>CATATG</u> AAAAAATATTTCTGAAGATGTTATCAAG
2546	3' <i>cwID</i> $_{\Delta 25aa}$ His ₆ pET22b	GCTCGAGTGCGGCCGCAAGCTT <u>GTCGAC</u> ACTTAAATATTTTTGTATTCCCTATGTAGATTG

Restriction sites are underlined and in bold.