Supporting Information

Dissection of Hydrogen Bond Interaction Network around an Iron-sulfur Cluster by Site-specific Isotope Labeling of Hyperthermophilic Archaeal Rieske-type Ferredoxin

Toshio Iwasaki,[*,†] Risako Fukazawa,[†] Yoshiharu Miyajima-Nakano,[†] Amgalanbaatar Baldansuren,[‡] Shinichi Matsushita,[†] Myat T. Lin,[§] Robert B. Gennis,[§] Kazuya Hasegawa,[¶] Takashi Kumasaka,[¶] and Sergei A. Dikanov[*,‡]

Table S1. PCR primers used for construction of new BL21(DE3) strain RF4RIL

PCR primers	Purpose	Oligonucleotide sequences (5'→3')	from[a]	to[a]
aspC UpF	Up.F	ATGAACGCCTGCATAATCCCTTCCTGC	989332	989358
aspC UpR[b]	Up.R	CTTCGAAGCAGCTCCAGCCTACACGCATTAAAAACAATGAAGCCCGC	989580	989602
aspC DownF[c]	Down.F	GGAATAGGAACTAAGGAGGATATTCATATGGACGAGGTTCCATTATGGTTACAGAAGG	990794	990821
aspC DownR	Down.R	GTCCGTCCATCGCTTACACCAAATCTAAAG	991163	991192
aspC ext.F[d]	deletion of *aspC*	TTGATGACAGCGGCCTGACACTGATGCAG	988858	988886
aspC ext.R[d]	deletion of *aspC*	ACTCCAACTTCTTTGGTCTGGTTGATGG	991552	991579
tyrB UpF	Up.F	GCGAACGTGATACCCGTCTTGGCGTAGTC	4173966	4173994
tyrB UpR[e]	Up.R	GAACTTCGAAGCAGCTCCAGCCTACACGCGATGGTTCTCCAGGTTTACGGGCAG	4174490	4174516
tyrB DownF[f]	Down.F	GGAATAGGAACTAAGGAGGATATTCATATGTGCAGGAAAGCAGGCTGGAG	4175711	4175730
tyrB DownR	Down.F	TGCCGAGGAGGTTAAAGGTGATTATTC	4176130	4176156
tyrB ext.F[d]	deletion of *tyrB*	GCGAAGGCAAACCTGGTCAACGTTCC	4173729	4173754
tyrB ext.R[d]	deletion of *tyrB*	GATTGACCAGCCCCCTACCCTACAATGG	4176451	4176478

[a] Positions in the genomic sequence of BL21(DE3) strain (NCBI GenBank code, AM946981). *aspC*, 989603-990793; *tyrB*, 4174517-4175710.

[b] This PCR primer consists of the oligonucleotide sequences from the BL21(DE3) *aspC* gene plus flanking region (23 bp) and the kanamycin resistance cassette gene (24 bp) (**Fig. 2**, step 1).

[c] This PCR primer consists of the oligonucleotide sequences from the BL21(DE3) *aspC* gene plus flanking region (28 bp) and the kanamycin resistance cassette gene (30 bp) (**Fig. 2**, step 1).

[d] Used for confirmation of the deletion of target chromosomal genes.

[e] This PCR primer consists of the oligonucleotide sequences from the BL21(DE3) *tyrB* gene plus flanking region (27 bp) and the kanamycin resistance cassette gene (27 bp) (**Fig. 2**, step 1).

[f] This PCR primer consists of the oligonucleotide sequences from the BL21(DE3) *tyrB* gene plus flanking region (20 bp) and the kanamycin resistance cassette gene (30 bp) (**Fig. 2**, step 1).