Supplementary materials

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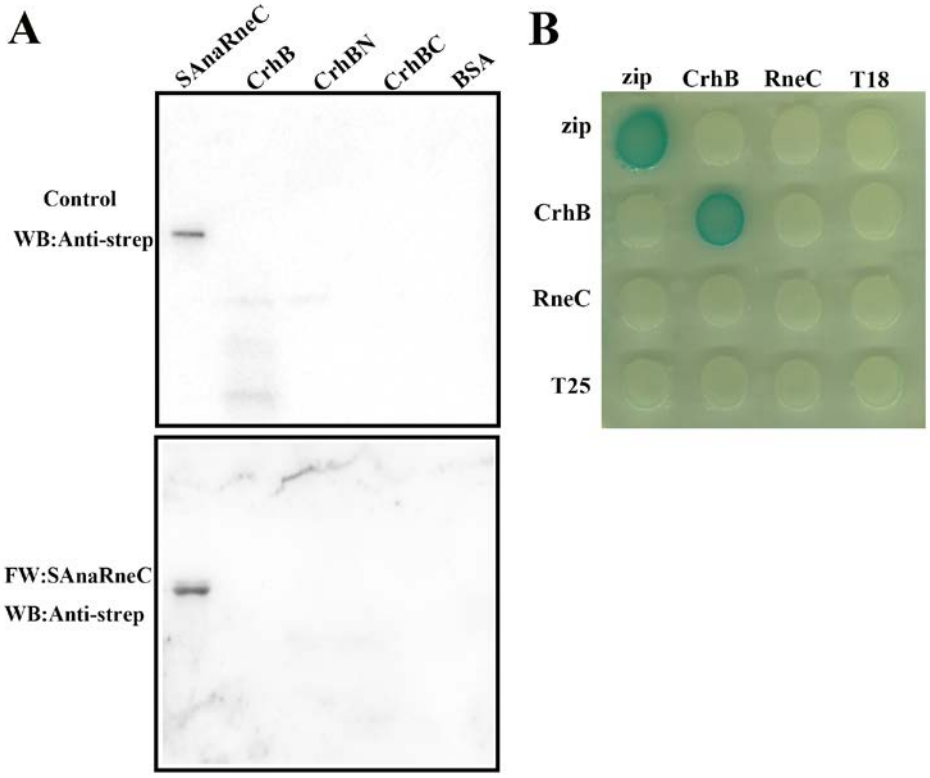

Figure S1 Far-western blotting assays (A) and bacterial two-hybrid analysis (B) of the interaction between AnaRneC and the different domains of CrhB. One of the PVDF membranes was incubated with SAnaRneC (A, bottom), and the other was incubated with skim milk as control (A, top). The final results were also detected with the anti-strep antibody. The horizontal rows (B) represent the *E. coli* BTH101 cells carrying the recombinant "T18" protein fusion plasmids, whereas the vertical columns represent the cells carrying the recombinant "T25" protein fusion plasmids. These results were based on three independent experiments.

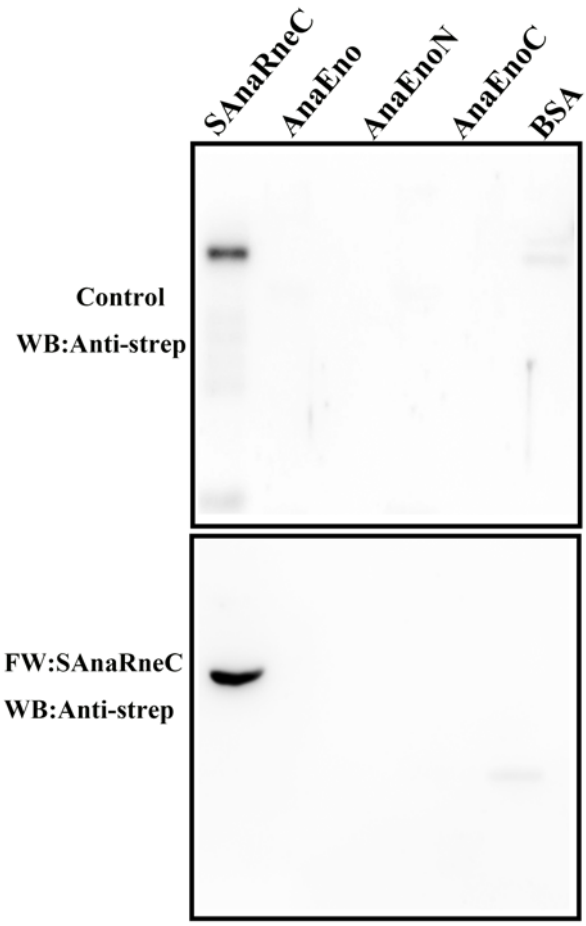

Figure S2 Far-western blotting assays of the interaction between AnaRneC and AnaEno. One of the PVDF membranes was incubated with SAnaRneC (bottom), and the other was incubated with skim milk as control (top). The final results were also detected with the anti-strep antibody.

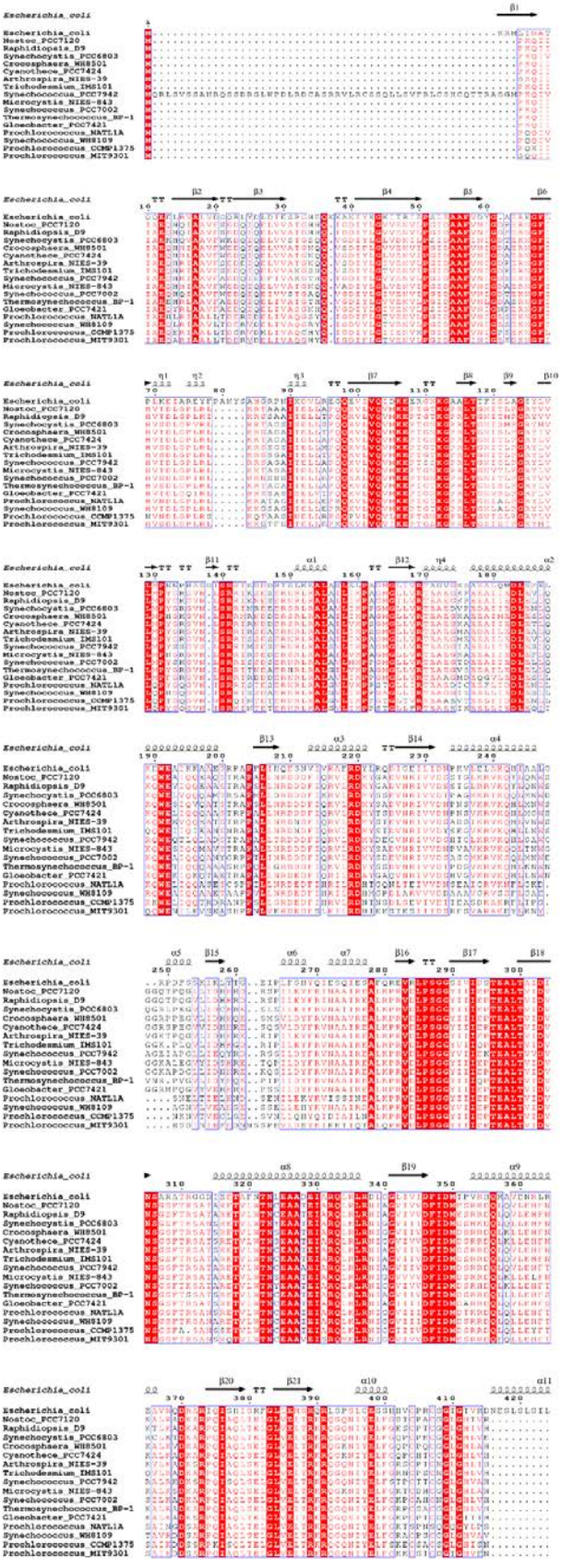

Figure S3 Structure based sequence alignment of RNase E catalytic domains from 16

representative cyanobacterial strains and *E. coli*. The secondary structural elements of *E. coli* RNase E are shown on the lines above the sequence alignment using the PDB file 2bx2. The coils represent α-helices, the arrows represent β-sheet, the η represents 3_{10} helices and TT represents β turns. Red letters represent homology and blue boxes indicate similarity. The red highlights represent identity across the sequences. Alignments were prepared using Clustal (http://www.clustal.org/) and ESPript (http://espript.ibcp.fr/ESPript/cgi-bin/ESPript.cgi).

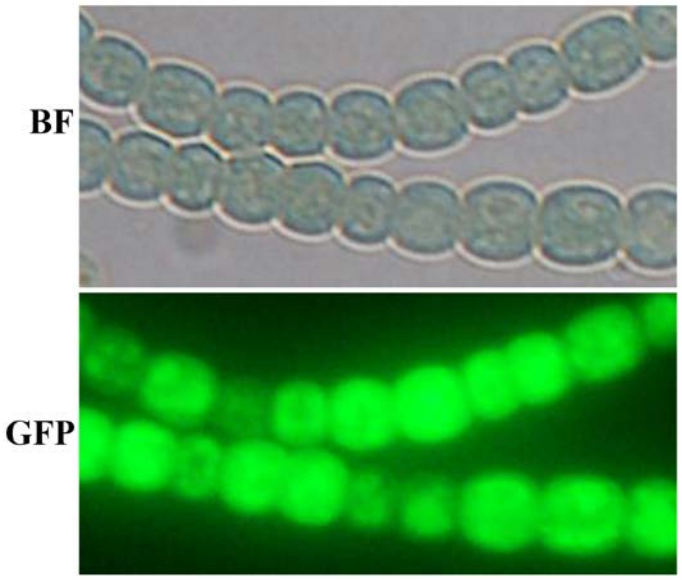

Figure S4 The distribution of GFP in PCC 7120. oeGFP was induced with 1 μM $CuSO_4$ and 10 mM theophylline for 48 h. Images were taken in bright field (BF) and GFP fluorescence by fluorescence microscope (Nikon Eclipse 80i) with 100× magnification.