

## Fig. S1. Structural elements and available crystal structures of subunits in the PBS from *Anabaena* sp. strain PCC 7120.

(A) Schematic of structural elements of the PBS subunits. The gene name of each subunit is in red. Sequence numbers are determined by alignment with known structures and structure prediction using Phyre2 (ref.<sup>1</sup>).

(B) Examples of crystal structures of APC (PDB code: 1B33<sup>2</sup>) and PC (PDB code: 1JBO<sup>3</sup>).

(C) Crystal structures of two conserved domains of linker proteins: Pfam01383 (PDB code: 1B33<sup>2</sup>) and Pfam00427 (PDB code: 1NPH<sup>4</sup>).