



**Figure S5.** Conserved motifs for phycobilin lyases members of the E/F clan of marine *Synechococcus*, as predicted by Protomata learner (v 0.07, <http://tools.genouest.org/tools/protomata/learn/>). E/Z-repeats motifs shared by these proteins are highlighted in blue. An additional motif of unknown function is indicated in pink. All sequences available for each protein were used for motif design. Numbers between brackets refer to the minimum and maximum number of residues between the different motifs.