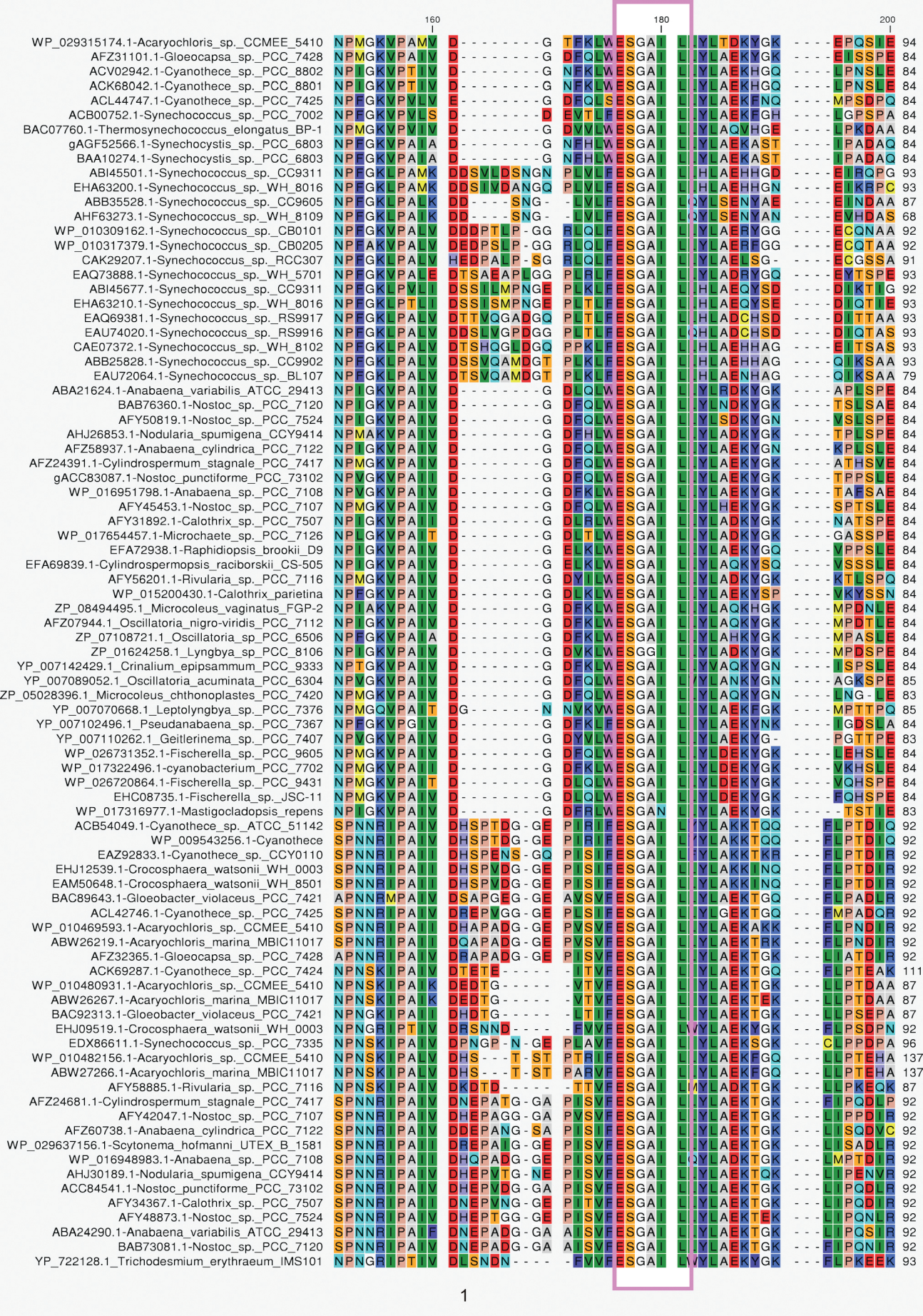
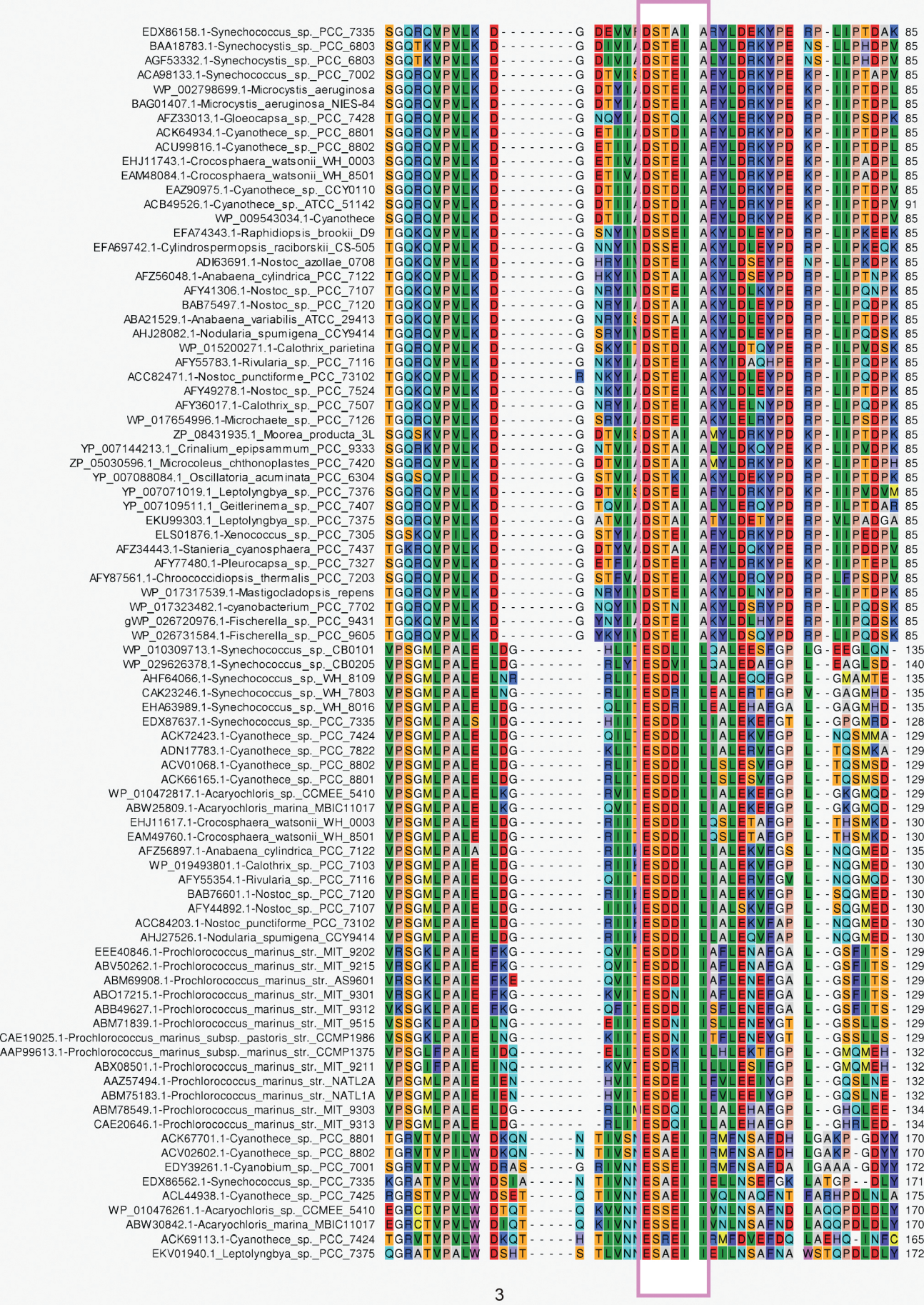
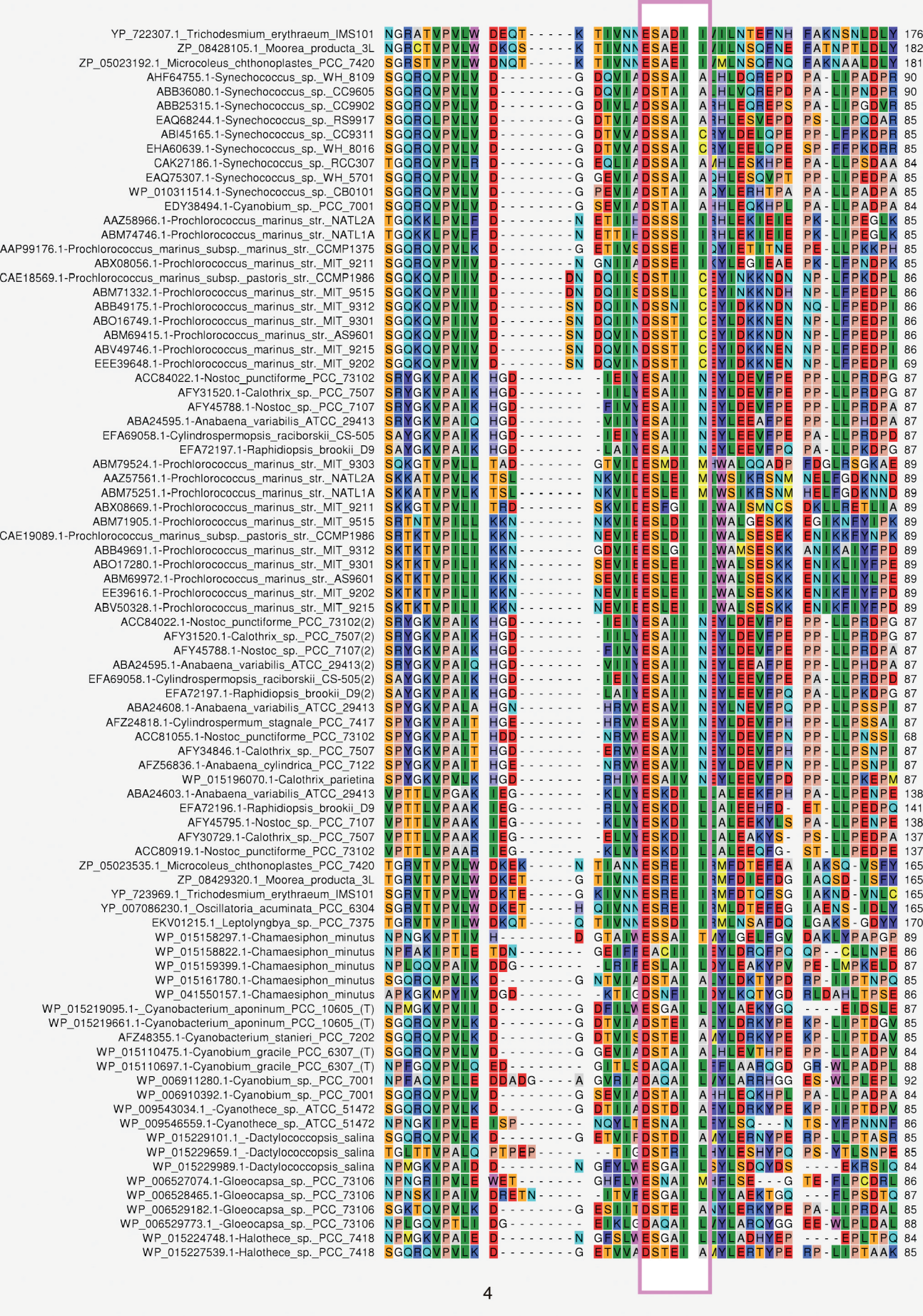

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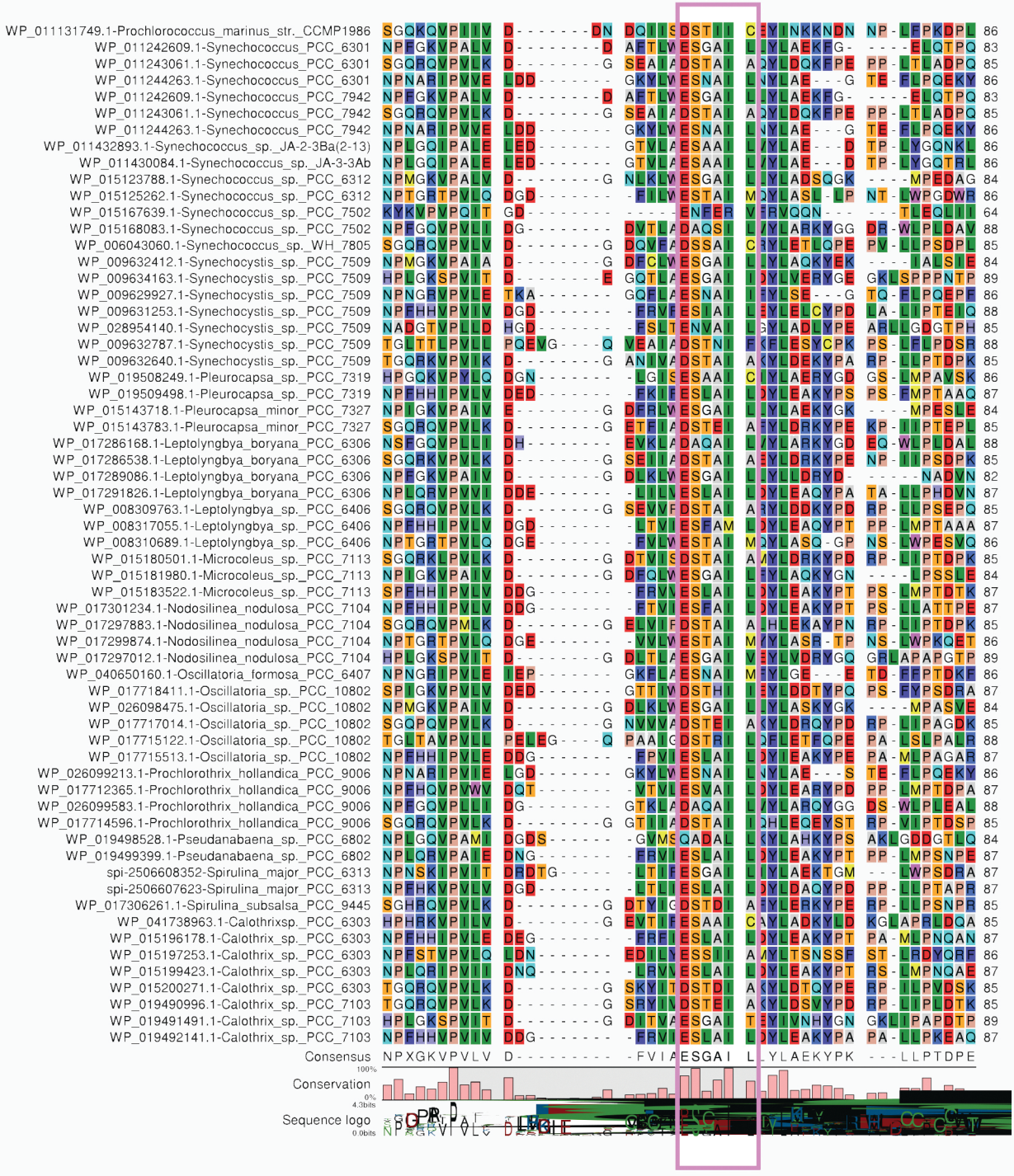
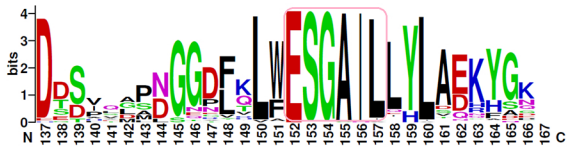
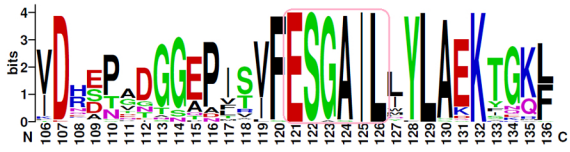


Figure S1 : Multiple sequence alignment of GST sequence found in 126 cyanobacterial sequences showing the GST motif architecture of "ES [GLNTARS][ADE]I[LAI]". Conserved domain is highlighted in pink box. Sequence alignment was performed as mentioned in section 2.2.



Motif 1 (Chi)



Motif 2 (cyGSTX1)



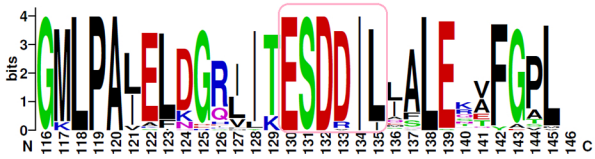
Motif 3 (cyGSTX2)



Motif 4 (cyGSTX3)



Motif 5 (cyGSTX4)



Motif 6 (cyGSTX5)



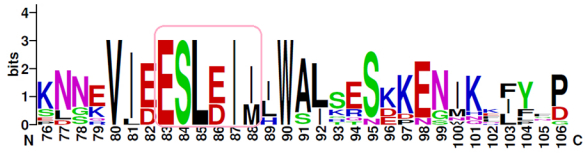
Motif 7 (cyGSTX6)



Motif 8 (cyGSTX7)



Motif 9 (cyGSTX8)



Motif 10 (cyGSTX9)



Motif 11 (cyGSTX10)



Motif 12 (cyGSTX11)

Figure S2: Highlight of the 12 GST motifs identified in retrieved GST sequences belonging to five orders of cyanobacteria. Sequence belonging to each clade was removed manually and performed sequence alignment as mentioned in section 2.2. The sequence logo was generated by subjecting the aligned file to Weblogo online server .