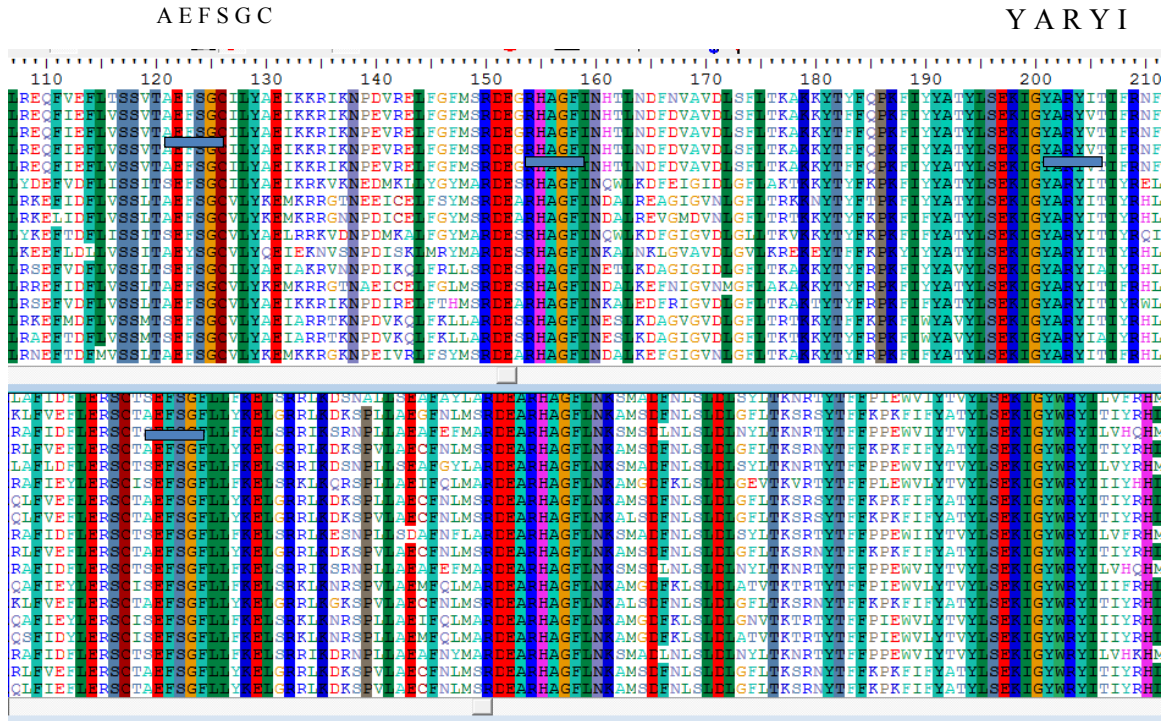
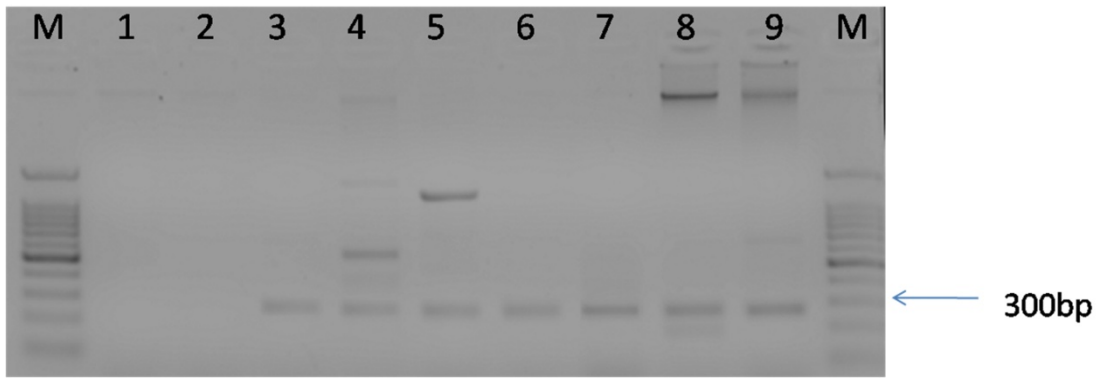


- 1 **Fig S1.** Alignment of AcsF gene sequences from AP (upper panel) and Cyanobacteria
- 2 (lower panel). Degenerate primers were designed to match the conserved regions in AP
- 3 species, but not to target Cyanobacteria.



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5 **Fig. S2** Test of *facF* primers on pure cultures. 1 - *G. aurantiaca*, 2 -
6 *Rhodospirillum rubrum*, 3 - *G. phototrophica*, 4 - *Rhodovulum sulfidophilum*, 5 -
7 *Erythrobacter* sp. NAP1, 6 - *Congregibacter litoralis*, 7 - *Hoeflea phototrophica*, 8 -
8 *Rubrivivax gelatinosus*, 9 - *Roseobacter* sp. COL2P, M - DNA markers. *G. aurantiaca* and
9 *Rsp. rubrum* served as negative controls.



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