

**Loss of the response regulator CtrA causes pleiotropic effects on gene expression in *Rhodobacter capsulatus* but does not mediate growth phase regulation**

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**Supplemental Figures (Figures S1, S2, S3, and S4)**

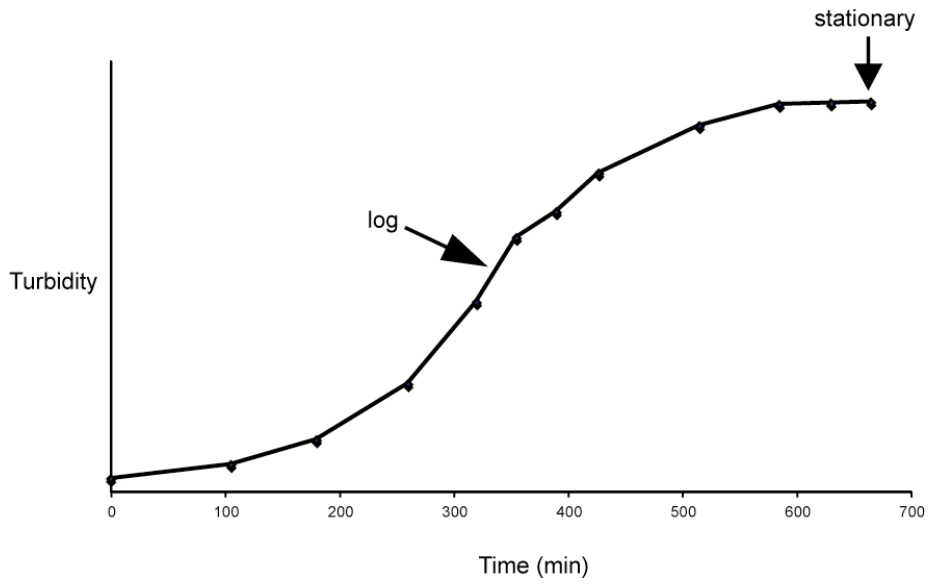


Figure S1. Growth curve of a representative experimental *R. capsulatus* culture. The time-points where cells were harvested for analyses are indicated.

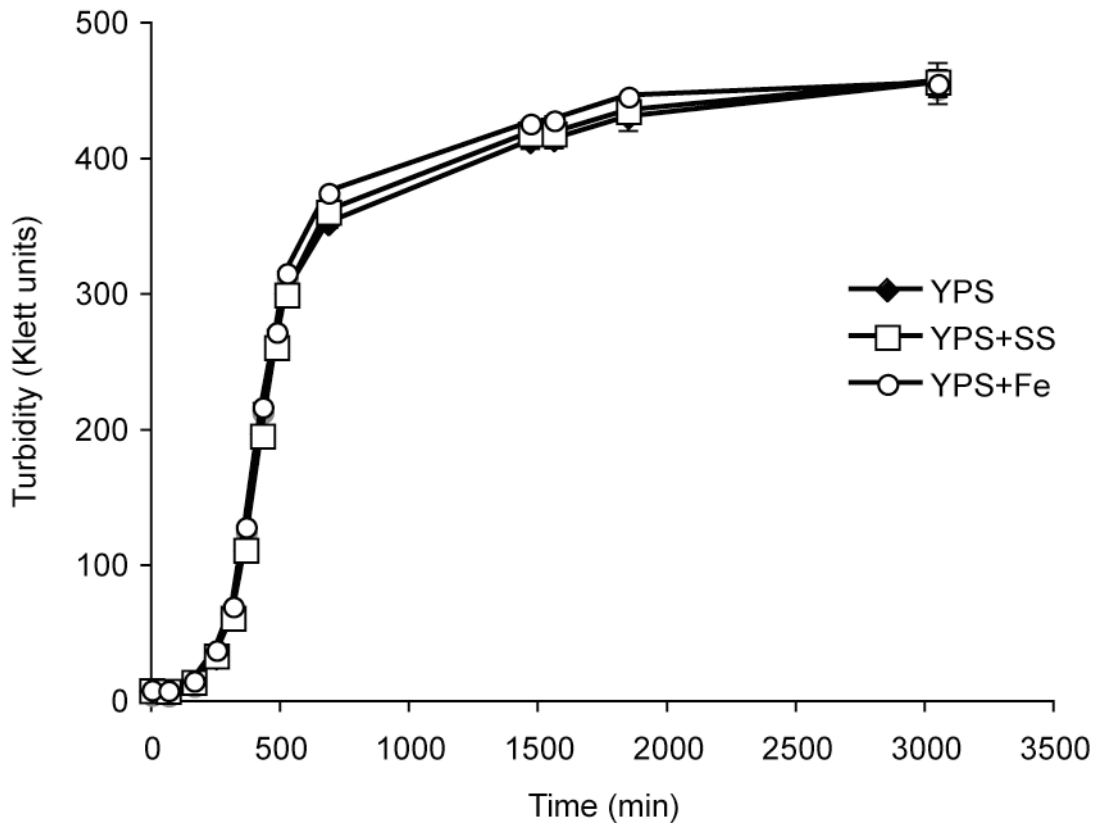


Figure S2. Effect of increased iron on *R. capsulatus* photosynthetic growth in YPS medium. *R. capsulatus* SB1003 was grown in YPS medium (YPS; filled diamonds), YPS medium supplemented with EDTA, MgSO<sub>4</sub>, CaCl<sub>2</sub>, FeSO<sub>4</sub>, thiamine HCl, MnSO<sub>4</sub>, H<sub>3</sub>BO<sub>3</sub>, Cu(NO<sub>3</sub>)<sub>2</sub>, ZnSO<sub>4</sub>, and NaMoO<sub>4</sub> (YPS+Fe; open circles) and YPS supplemented with the same components except FeSO<sub>4</sub> (YPS+SS; open squares). Triplicate cultures were grown in each type of medium and the growth monitored by turbidity using a Klett-Summerson photoelectric colorimeter, and plotted as the mean  $\pm$  SD.

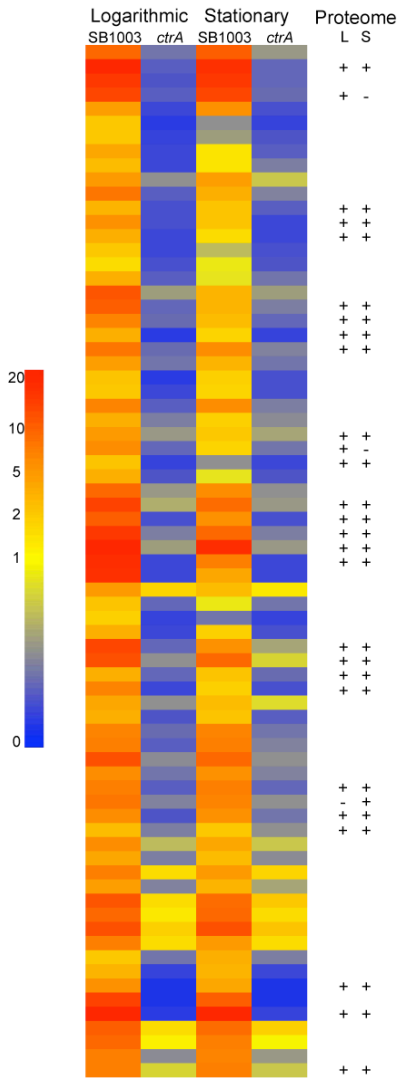


Figure S3. CtrA control of flagellum-dependent motility gene expression in *R. capsulatus*. The heat map shows the quantitative transcription data for the 73 putative flagellum-dependent motility genes identified as requiring CtrA for proper expression, by their gene order on the chromosome. For the peptides detected by proteomics, concordance of protein and transcription data are indicated with a “+” or “-” for the different growth phases (L, logarithmic; S, stationary). The scale is colored to indicate relative amounts of the transcripts as indicated in the culture samples indicated above the columns. The numerical transcript and proteome data for these genes is in Table S6.

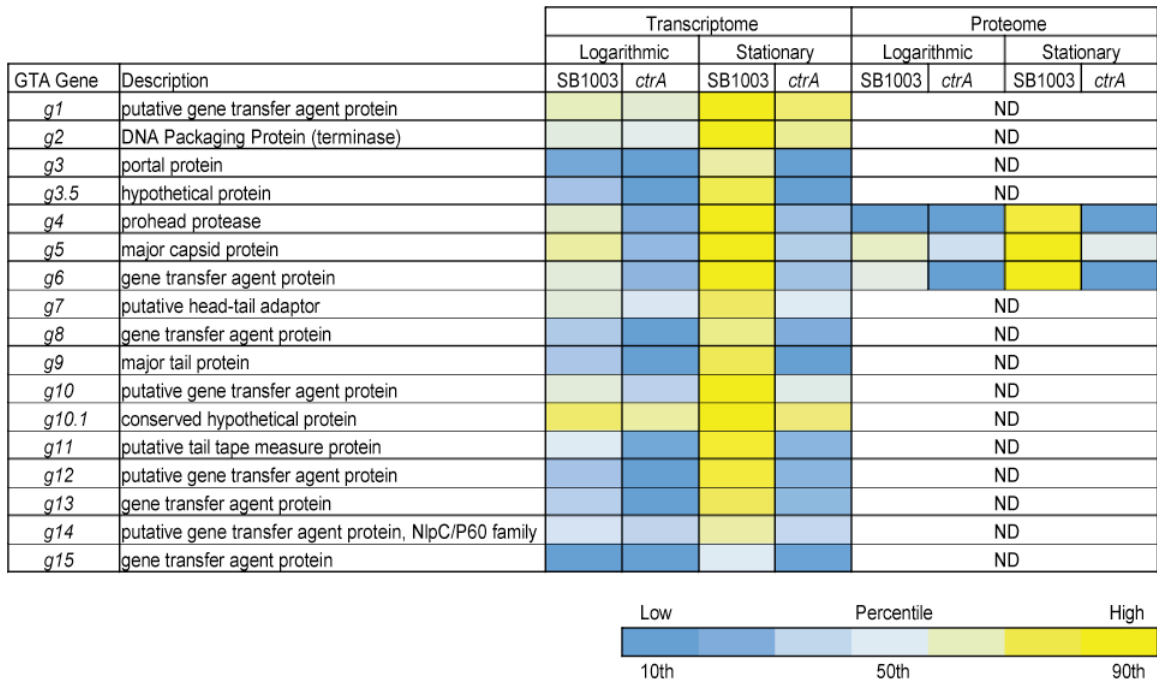


Figure S4. Expression of the RcGTA structural gene cluster. The requirement for CtrA and the effects of growth phase on RcGTA gene expression are shown. The scale is colored to indicate relative abundance of the transcripts and proteins as indicated. ND, not detected. The RcGTA proteins encoded by *g3* and *g15* (*rcc01684* and *rcc01698*, respectively) were detected in the proteomic analyses but did not pass the threshold criteria for inclusion.