



Figure S1: Restriction maps of constructions used to inactivate *ldhA* and confirmation of segregated mutant. (A) Restriction map and primer locations of construction used to inactivate *ldhA*. (B) Electrophoretic analysis of PCR products to evaluate putative mutants. The *ldhA* locus was amplified by PCR with the primers indicated in (A). The DNA templates were derived from wild-type *Synechococcus* 7002 (indicated as Ctrl), from a LDH::*aacC1* transformant. The amplicon from the transformant is 0.8 kb larger than the corresponding amplicon from the wild type. This demonstrates that *ldhA* and *ldhA*::*aacC1* alleles had segregated fully in both transformants. DNA size markers (Ladder I; GeneChoice, Frederick, MD) are in the first lane indicated as M.