Supporting Information

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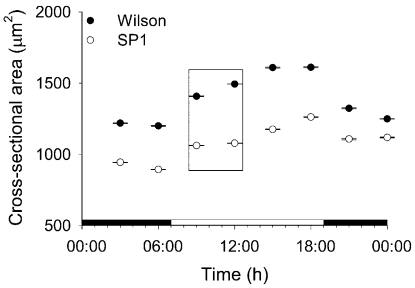

Fig. S1. Variation in cross-sectional area (CSA) for *K. brevis* over a 24-h period. Daily variation in CSA for *K. brevis* Wilson clone (black) and SP1 (white) control (acclimated) cultures is shown. Live *K. brevis* cells were imaged by using an Imaging FlowCytobot (1) every 3 h for a 24-h period. CSA was calculated following the method from Henrichs et al. (2) and used as a proxy for change in cell volume in response to osmotic adjustment. The box identifies the time period in which the subsequent hypoosmotic stress experiments were conducted. During this lighted portion of the diel cycle, the smallest change in CSA was observed. The black and white bars indicate the intervals of the 12:12-h light:dark cycle. Error bars represent 1 SEM. The number of cells examined for Wilson clone ranged from n = 10,110 to 14,122 and for SP1 clone ranged from n = 10,428 to 18,773.

1. Olson RJ, Sosik HM (2007) A submersible imaging-in-flow instrument to analyze nano-and microplankton: Imaging FlowCytobot. *Limnol Oceanogr Methods* 5:195–203.
2. Henrichs DW, Sosik HM, Olson RJ, Campbell L (2011) Phylogenetic analysis of *Brachidinium capitatum* (DINOPHYCEAE) from the Gulf of Mexico indicates membership in the Kareniaceae. *J Phycol* 47:366–374.

Table S1. Source information for *K. brevis* clones

Isolate	Collection location	Date
Wilson (CCFWC268)	John's Pass, FL	1953
TXB4 (CCFWC267)	South Padre Island, TX	1999
SP3	South Padre Island, TX	1999
SP1	South Padre Island, TX	1999

CCFWC, Culture Collection of the Fish and Wildlife Conservation Commission.