



**Supplementary Figure S1.** Effect of sulphate limitation on *Thalassiosira pseudonana*. **A.** cell number **B.** intracellular DMSP concentration, **C.** volume per cell, **D.** Fv/Fm (The ratio of variable to maximum fluorescence), **E.** APR activity of *Thalassiosira pseudonana* cultures with an initial sulphate concentration of either 5 mM (dashed line) or 25 mM (solid line). Results are shown as means  $\pm$  standard deviation from 3 independent cultures. Asterisks mark values significantly different ( $P < 0.05$ , T-test) between the 5 mM and 25 mM cultures.