

**Figure S1**. Flow cytometric cell parameters of *Prochlorococcus* alone (black line, circles) and *Prochlorococcus* with *Alteromonas macleodii* MIT1002 (grey line, triangles) during the experiment. (A) median red fluorescence (proxy for chlorophyll) per cell (+/- SD) (B) median forward scatter per cell (proxy for cell size, +/- SD). The vertical dashed line indicates the time at which the *Alteromonas* strain was added to the culture; values at this timepoint were determined from cells collected prior to heterotroph addition. All values were normalized to reference bead standards run within each sample.