

Supplementary Figure S1. Growth of axenic *Prochlorococcus* strains SB, MIT0604, MIT9301, MED4, and axenic *Synechococcus* strain WH8102 in the presence of 800 μ M ammonium, nitrate, or cyanate. Bulk culture fluorescence (y-axis) was used as a proxy for cell numbers during exponential growth. Data points for the growth of parent cultures in ammonium based medium are highlighted in purple. Dashed lines represent sequential transfers in the alternative nitrogen sources. A control without added nitrogen was used to estimate when carry-over ammonium from the parent culture was completely consumed. Exponential phase during the final growth curve is highlighted in pink with the data points used for calculating growth rates connected by a line. Values are mean \pm 1 standard deviation of triplicate cultures. When error bars do not show, they are within the size of the symbol.