

Figure S5. Comparison of the protein concentration of PstS, PhoA and PhoX (fmol L-1) to picocyanobacterial cell number (cells per mL-1) in the control (black bars) and DOP addition (grey bars) for (a) *Prochlorococcus* and (b) *Synechococcus*. For both *Prochlorococcus* and *Synechococcus*, the ratio was calculated by dividing the protein concentration (fmol L-1) by cell abundance (cells L-1). Comparison on per cell protein content between the control and DOP indicates that the addition of DOP decreased the per cell PstS and PhoA but increased the per PhoX in *Prochlorococcus* (a), but the addition of DOP increased the per cell PstS and PhoA and also increased the per cell PhoX.