

**Supplemental Figure S1**. Quantification of ammonium (NH<sub>4</sub><sup>+</sup>) concentrations on the 3<sup>rd</sup> day of cultivation by sampling of the growth medium during the 14h light(L): 10h dark(D) diel cycle. Cells were inoculated on day 0 in media with varying concentrations of asparagine (800  $\mu$ M, 400  $\mu$ M and 200  $\mu$ M), arginine (800  $\mu$ M), NH<sub>4</sub><sup>+</sup> (800  $\mu$ M), or NO<sub>3</sub><sup>-</sup> (800  $\mu$ M).