



**Figure S4.** Concordance of replication shown as the ranges between biological duplicate measurements of mRNA abundances (RPKM) values for 2479 genes at each steady-state condition for which *T. elongatus* gene expression was analyzed. Specific turbidostat steady-state conditions are designated with the following abbreviations: axenic *T. elongatus* (AX), binary culture (BC), high light (1995  $\mu\text{mol photons m}^{-2} \text{s}^{-1}$ ; HL), medium light (1190  $\mu\text{mol photons m}^{-2} \text{s}^{-1}$ ; ML), low light (197  $\mu\text{mol photons m}^{-2} \text{s}^{-1}$ ; LL), high  $\text{O}_2$  ( $p\text{O}_2=0.6 \text{ ATM}$ ; HO), medium  $\text{O}_2$  ( $p\text{O}_2=0.3 \text{ ATM}$ ; MO) and low  $\text{O}_2$  ( $p\text{O}_2=0.0 \text{ ATM}$ ; MO).