

Table 1. Properties of *C. reinhardtii* acclimated to different light and carbon supply regimes

Changes in *C. reinhardtii* phenotype upon acclimation to different light and carbon supply regimes are shown. Data columns from left to right show cell number doubling time; Chl content per cell; Chl *a/b* ratio, calculated from the fitting of absorption spectra of 80% acetone-extracted pigments from cells; PSI/PSII ratio, measured based on the electrochromic shift (ECS) signal; PSI/PSII ratio, obtained by immunoblot (WB) quantification of PSAA and CP43; LHCII/PSII monomer calculations based on Chl *a/b* and PSI/PSII data, as described in "Materials and Methods"; and maximal quantum efficiency of PSII (F_v/F_m). The data are averages and \pm SE derived from a minimum of two biological replicates, each with three technical replicates.

Condition	Doubling Time	Chl Content	Chl <i>a/b</i>	PSI/PSII ECS	PSI/PSII WB	LHCII/PSII	F_v/F_m
	<i>h</i>	<i>pg</i>					
Mnl	9.0 \pm 0.0	3.9 \pm 0.21	2.57 \pm 0.00	1.05 \pm 0.34	1.00 \pm 0.00	4.9	0.71 \pm 0.01
Mhl	7.3 \pm 0.4	2.0 \pm 0.11	2.87 \pm 0.03	1.13 \pm 0.02	1.35 \pm 0.30	4.3	0.70 \pm 0.02
Pnl	25.0 \pm 1.4	2.6 \pm 0.02	2.55 \pm 0.03	1.67 \pm 0.11	1.95 \pm 0.31	8	0.68 \pm 0.01
Phl	22.5 \pm 2.1	1.3 \pm 0.02	2.57 \pm 0.02	1.54 \pm 0.58	1.65 \pm 0.28	7.5	0.59 \pm 0.00
CO2nl	8.8 \pm 0.4	2.1 \pm 0.12	2.56 \pm 0.05	0.96 \pm 0.04	1.04 \pm 0.17	4.9	0.75 \pm 0.01
CO2hl	4.6 \pm 0.5	0.6 \pm 0.02	3.00 \pm 0.05	0.62 \pm 0.04	0.66 \pm 0.13	2.2	0.76 \pm 0.01