

**Table 2.** Summary of the kinetic parameters,  $V_{\max}$  ( $\mu\text{mol}\cdot(\text{mg Chl}^{-1})\cdot\text{h}^{-1}$ ) and  $K_{1/2}$  values ( $\mu\text{M}$ ) of net  $\text{O}_2$  evolution, net  $\text{HCO}_2$  transport, and gross  $\text{CO}_2$  transport during steady-state photosynthesis in *Synechococcus* PCC7002 provided with different  $\text{CO}_2$  concentrations during growth. The data are means  $\pm$  SD from three to four independent experiments

	High $C_i$ (20000 $\mu\text{L}\cdot\text{L CO}_2$ )	Intermediate (1400 $\mu\text{L}\cdot\text{L CO}_2$ )	Air grown (350 $\mu\text{L}\cdot\text{L CO}_2$ )	Low $C_i$ (20 $\mu\text{L}\cdot\text{L CO}_2$ )
Net $\text{O}_2$ evolution:				
$V_{\max}$	561 $\pm$ 37	541 $\pm$ 21	553 $\pm$ 33	544 $\pm$ 49
$K_{1/2}(\text{CO}_2)$	1.02 $\pm$ 0.07	1.44 $\pm$ 0.03	0.28 $\pm$ 0.06	0.088 $\pm$ 0.01
$K_{1/2}(\text{HCO}_2)$	145 $\pm$ 11	147 $\pm$ 6	48 $\pm$ 9	10.8 $\pm$ 2.0
Net $\text{HCO}_2$ uptake:				
$V_{\max}$	471 $\pm$ 46	456 $\pm$ 19	497 $\pm$ 54	515 $\pm$ 44
$K_{1/2}(\text{HCO}_2)$	131 $\pm$ 15	129 $\pm$ 11	45.3 $\pm$ 9.4	11 $\pm$ 2
Gross $\text{CO}_2$ uptake:				
$V_{\max}$	145 $\pm$ 12	141 $\pm$ 18	161 $\pm$ 19	197 $\pm$ 24
$K_{1/2}(\text{CO}_2)$	2.40 $\pm$ 0.2	2.30 $\pm$ 0.2	1.24 $\pm$ 0.1	0.543 $\pm$ 0.04