

Supplementary materials

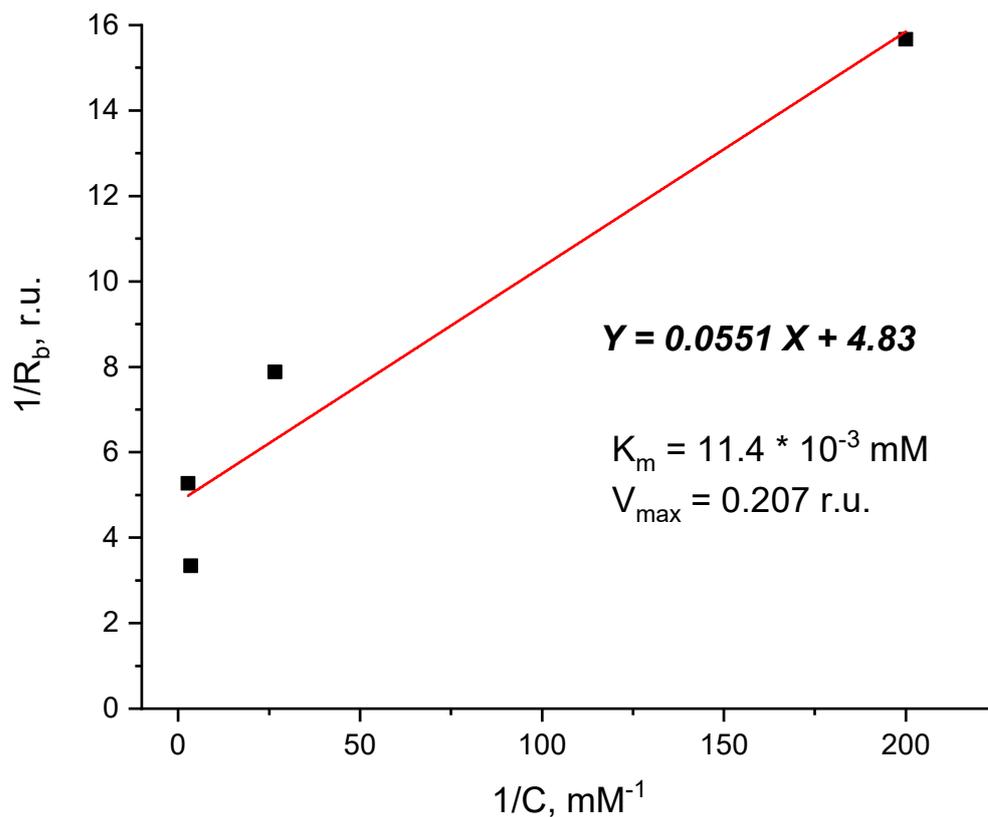


Figure S1. **The Lineweaver and Burk plot for the rate R_b (6-30 ms) of O-J-I-P transient vs the substrate (HCO_3^-) concentration, obtained for thylakoids preparation.** The concentrations of bicarbonate (C) in the sample were 5, 38, 288 and 365 μM . I used the equation of the line plot to calculate K_m and V_{max} (which are also shown in Table 2 in the main text). The final concentration of thylakoids preparation was 10 ($\mu\text{g Chl}$) $\cdot\text{mL}^{-1}$. Each point was an average of at least 3 separate experiments with calculated SD.

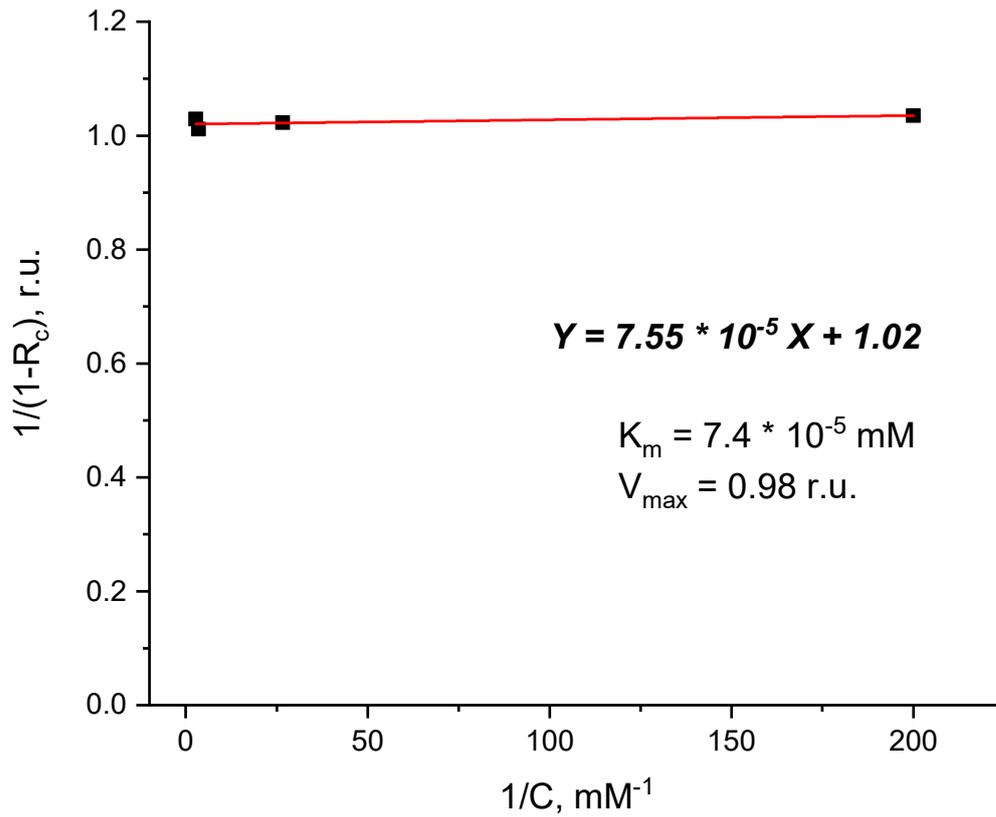


Figure S2. **The Lineweaver and Burk plot for the rate $1-R_c$ (400-800 ms) of O-J-I-P transient vs the substrate (HCO_3^-) concentration, obtained for thylakoids preparation.** The concentrations of bicarbonate (C) in the sample were 5, 38, 288 and 365 μM . I used the equation of the line plot to calculate K_m and V_{max} (which are also shown in Table 2 in the main text). The final concentration of thylakoids preparation was 10 ($\mu\text{g Chl}$) $\cdot\text{mL}^{-1}$. Each point was an average of at least 3 separate experiments with calculated SD.

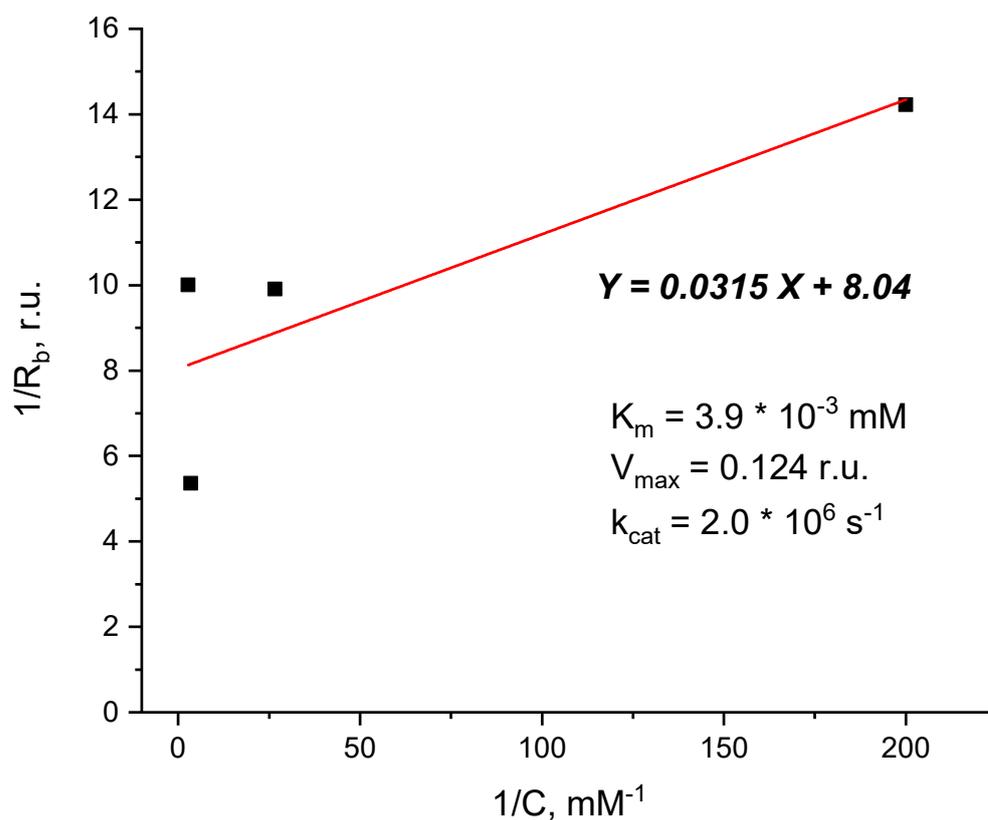


Figure S3. **The Lineweaver and Burk plot for the rate R_b (6-30 ms) of O-J-I-P transient vs the substrate (HCO_3^-) concentration, obtained for BBY preparation.** The concentrations of bicarbonate (C) in the sample were 5, 38, 288 and 365 μM . I used the equation of the line plot to calculate K_m and V_{max} (which are also shown in Table 2 in the main text). The final concentration of BBY preparation was 10 ($\mu\text{g Chl}$) $\cdot\text{mL}^{-1}$. Each point was an average of at least 3 separate experiments with calculated SD.

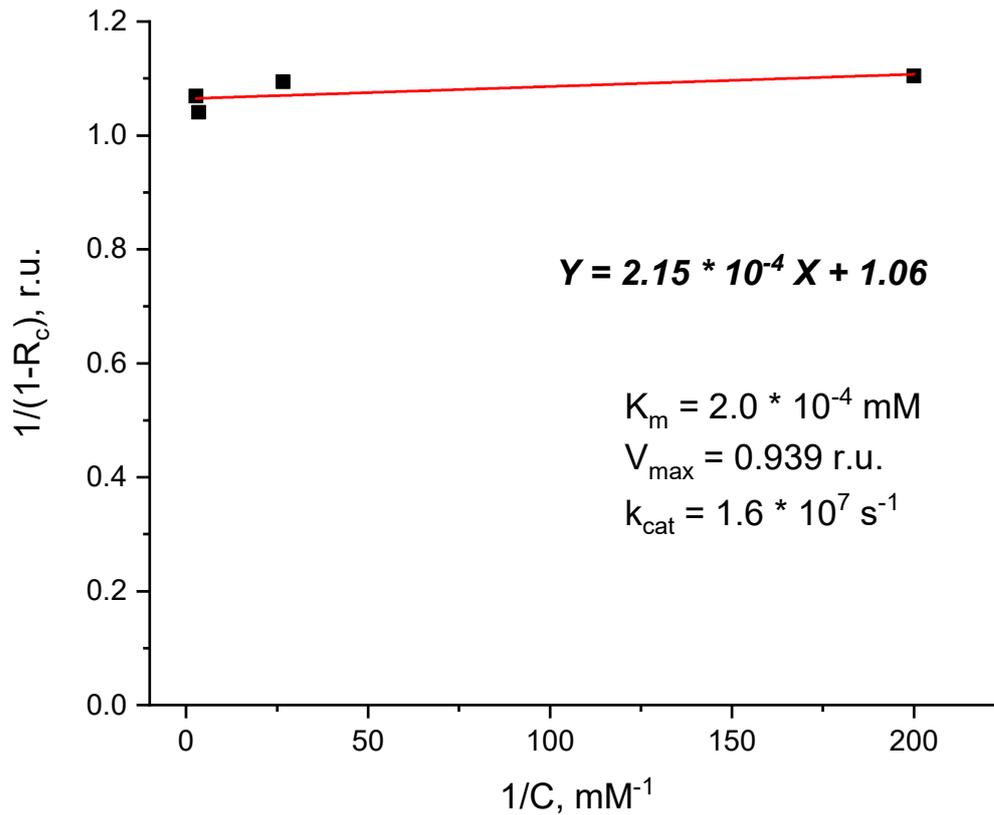


Figure S4. **The Lineweaver and Burk plot for the rate $1-R_c$ (400-800 ms) of O-J-I-P transient vs the substrate (HCO_3^-) concentration, obtained for BBY preparation.** The concentrations of bicarbonate (C) in the sample were 5, 38, 288 and 365 μM . I used the equation of the line plot to calculate K_m and V_{max} (which are also shown in Table 2 in the main text). The final concentration of BBY preparation was 10 ($\mu\text{g Chl}$) $\cdot\text{mL}^{-1}$. Each point was an average of at least 3 separate experiments with calculated SD.