Supplementary Material

# Supplementary Figures



**Supplementary Figure S1.** Schematic diagram of the construct for overexpression and knockdown (RNAi) of *ELIP3*. Knockdown construct used to induce RNAi, which expresses hairpin *ELIP3* dsRNA by cloning forward and reverse partial *ELIP3* coding sequences (314 bp) on both sides of DNA spacer in the 3′ UTR of *aph7*″ marker gene (the hygromycin resistant gene).



**Supplementary Figure S2.** Western blot analysis of ELIP3 and D1 in *C. reinhardtii* with or without supply of 5% CO2 under 4℃ and nonstress light intensity (50 μmol photons m-2 s-1). ATPβ was detected as a loading control.

# Supplementary Table

**Supplementary Table S1.** List of primers used in this study.

|  |  |  |
| --- | --- | --- |
| Name | Sense primer (forward) | Antisense primer (reverse) |
| ELIP3\_RNAi | AACTGCAGATCTAGACGCCTGGCCATGCTGGGCTT | AACCTAGGAAAGCTTGCCGCAGCAGAATCGGCTGT |
| ELIP3\_qPCR | GTGGCACCGTCGAG CCCAC | GCGGTGCCGCTGAAGGACAT |
| 18s rRNA\_qPCR | CCTGCGGCTTAATTTGACTC | ACCGGAATCAACCTGACAAG |
| ELIP3\_Northern blot | GATGGCACCGTCGAGCCCAC | GCGGTGCCGCTGAAGGACAT |