

## Supplementary Information

### **ARTP Mutagenesis of *Schizochytrium* sp. PKU#Mn4 and Clethodim-based Mutant Screening for Enhanced Docosahexaenoic Acid Accumulation**

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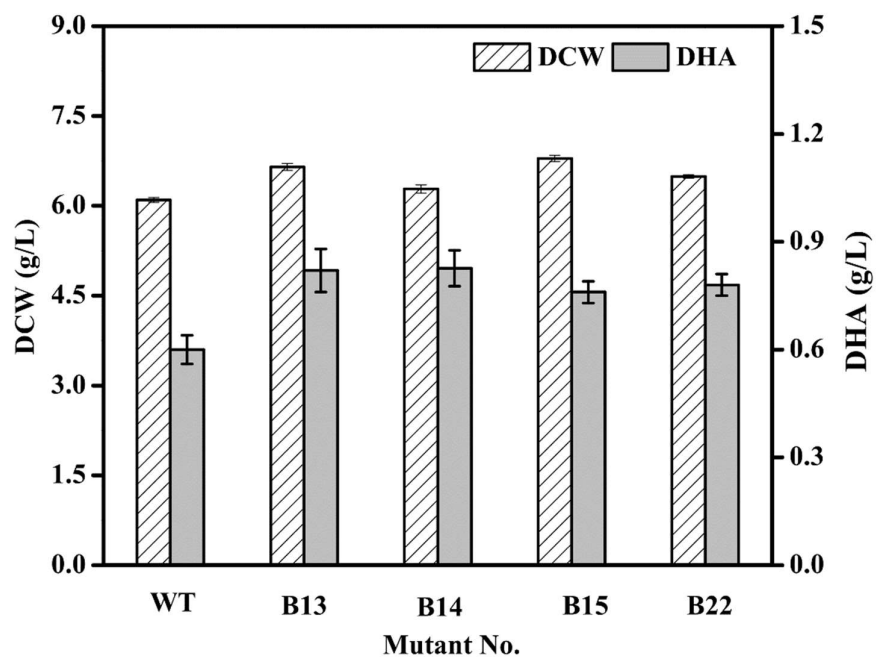
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**Figure S1.** Biomass and DHA contents of the wild-type strain PKU#Mn4 and its mutants resulting from the first round of ARTP mutagenesis and clethodim (80  $\mu\text{g/mL}$ )-based screening. WT strain and mutants were cultured in M4 medium and the culture samples were collected at 96 h for biomass and DHA quantification.

**Table S1.** Palmitic acid content of the wild-type strain PKU#Mn4 and its mutants obtained from the second round of ARTP mutagenesis and clethodim-based screening.

<b>Mutant/Strain</b>	<b>C16:0</b>
WT	0.88
A10	1.19
A11	1.20
A17	1.16
A22	1.30
A23	1.22
A25	1.29
A29	1.23
A36	1.18
A49	1.08
A54	1.21
A74	1.20
A75	0.87
A78	1.36
A81	1.24
A89	1.38
A92	1.40

Note: WT strain and mutants were cultured in M4 medium and the culture samples were collected at 96 h for fatty acids quantification.