

# <Supporting Information>

## **Variation of fatty acid desaturation in response to different nitrate levels in *Auxenochlorella pyrenoidosa***

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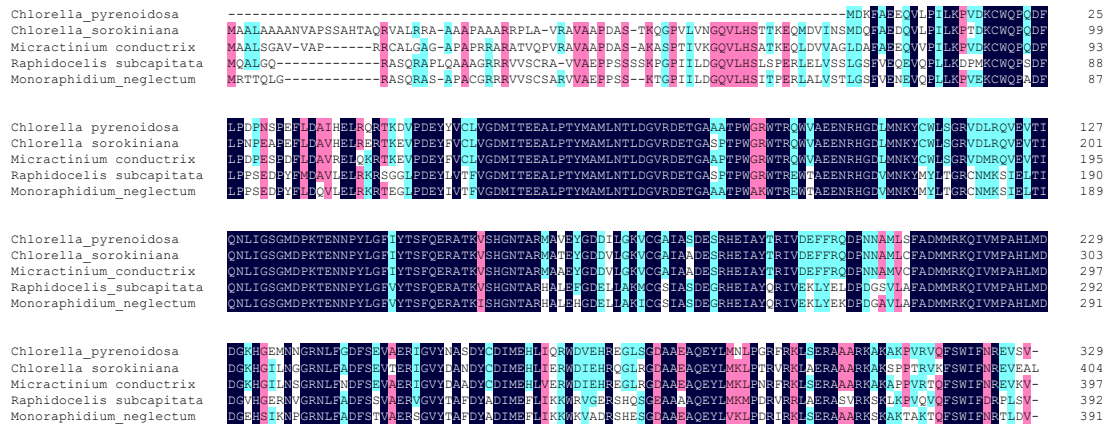
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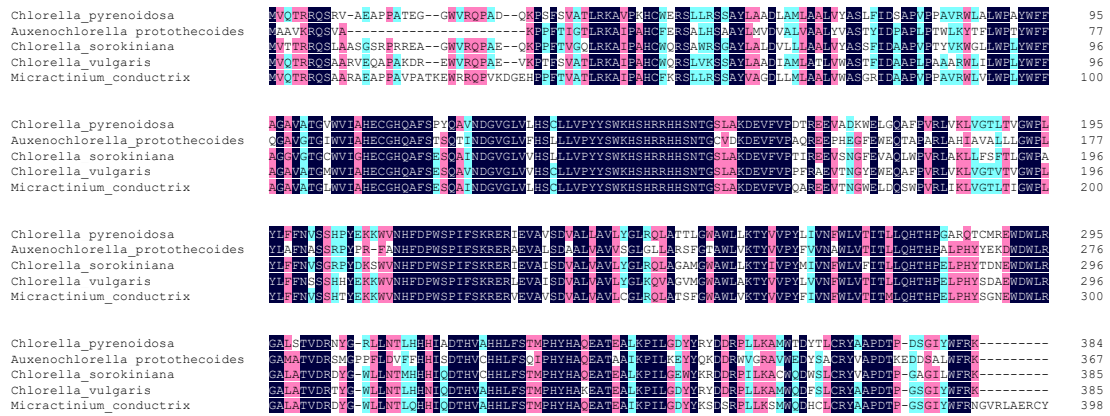
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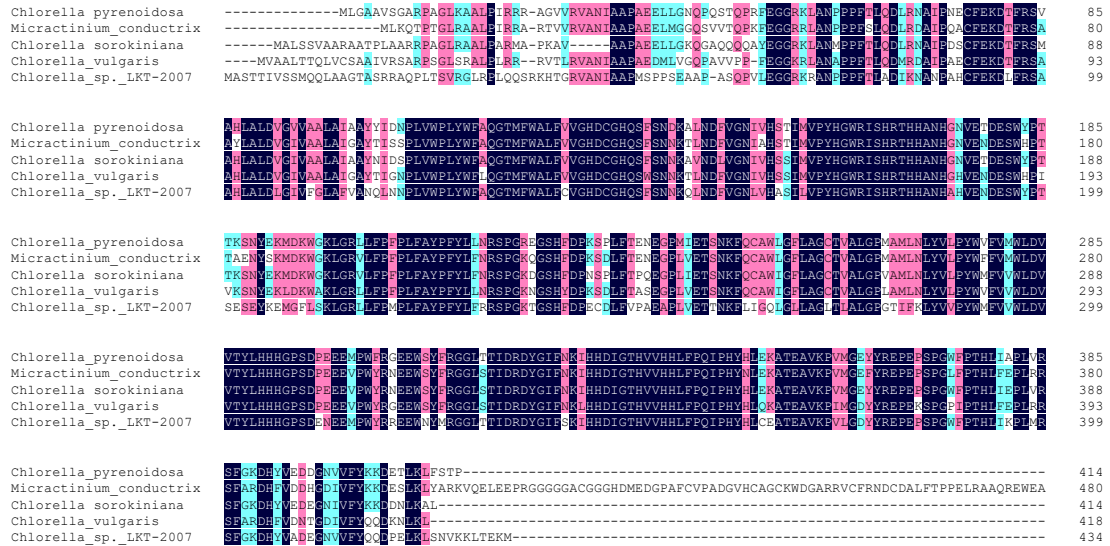
(a) Δ9FAD



(b) Δ12FAD



(c) Δ15FAD



**Figure S1.** Alignment of the deduced amino acid sequences of the Δ9, Δ12 and Δ15 fatty acid desaturase enzyme from *Auxenochlorella pyrenoidosa* (KQ481983.1), *Chlorella vulgaris* (ACF98528.1, BAB78717.1), *Microactinium conductrix* (PSC67766.1, PSC74767.1, PSC71199.1), *Chlorella sorokiniana* (PRW44938.1, PRW57598.1, PRW60085.1), *Monoraphidium neglectum* (XP\_013899493.1), *Raphidocelis subcapitata* (GBF93822.1), *Auxenochlorella protothecoides* (XP\_011396739.1) and *Chlorella* sp. LKT-2007 (ABU54076.2).