Co-existence of photosynthetic and respiratory activities in cyanobacterial thylakoid membranes

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Keywords

Cyanobacteria; Electron transport; Photosynthesis; Respiration; Thylakoid membrane

Abbreviations

ARTO: Alternative Respiratory Terminal Oxidase; CURT1: Curvature Thylakoid 1 protein; Cyt: Cytochrome; Fd: Ferredoxin; FFEM: Freeze-fracture electron microscopy; Flv: Flavodiiron protein; FNR: Ferredoxin-NADP oxidoreductase; FRAP: Fluorescence Recovery after Photobleaching; GFP: Green fluorescent protein; Hox: Bidirectional Ni-Fe hydrogenase; LHCII: Light-harvesting chlorophyll a/b-binding protein of Photosystem II; NADP: Nicotinamide adenine dinucleotide phosphate; NDH: NAD(P)H-dehydrogenase; PET: Photosynthetic electron transport; pmf: proton-motive force; PQ: plastoquinone; PSI: Photosystem I; PSII: Photosystem II; PGR5: Proton gradient regulation protein 5; PGRL1: PGR5-like protein 1; PM: Plasma (cytoplasmic) membrane; PTOX: Plastoquinol terminal oxidase; RET: Respiratory electron transport; SDH: Succinate dehydrogenase; TM Thylakoid membrane; YFP: Yellow fluorescent protein