NdhV subunit regulates the activity of type-1 NAD(P)H dehydrogenase under high light conditions in cyanobacterium *Synechocystis* sp. PCC 6803

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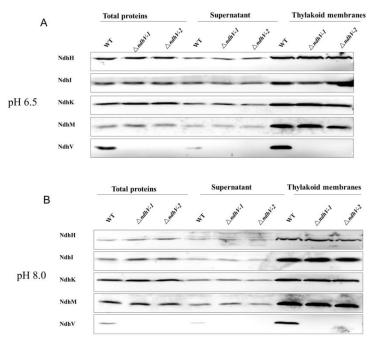


Figure 1S. Analysis of accumulation of Ndh subunits in WT and ΔndhV strains.

(A) Immunodetection of Ndh subunits in total proteins, supernatant and thylakoid membranes of WT and ΔndhV mutants in pH 6.5. Each sample was obtained from the cells cultured in pH 6.5. Immunoblotting was performed using antibodies against Ndh subunits (NdhH, NdhK, NdhM and NdhV). Each lane was loaded with 30 μg proteins.

(B) Immunodetection of Ndh subunits in total proteins, supernatant and thylakoid membranes of WT and ΔndhV mutants pH 8.0. Each sample was obtained from the cells cultured in pH 8.0. Immunoblotting was performed using antibodies against Ndh

subunits (NdhH, NdhI, NdhK, NdhM and NdhV). Each lane was loaded with 30µg proteins.

Supplemental Table 1

Primers List and Sequence

Primers used to construct the pMD-19T- $\Delta ndhV$ vector

Name	Sequence (5'-3')	Description
ndhV-up-F	GAGCCTGAGCCAATTGAGCCG	Amplification of upstream
ndhV-up-R	ACAACGTGGCTTTCCCCACTGCGGGGGGTTTAGCTT	region
ndhV-mid-F	CCGCAGTGGGGAAAGCCACGTTGTGTCTCA	Amplification of kanamycin
ndhV-mid-R	GGGCTTCTCTTCGGGCGCTGAGGTCTGCCTCG	resistance gene
ndhV-Dn-F	CTCAGCGCCCGAAGAGAAGCCCTTCACCGA	Amplification of
ndhV-Dn-R	TAGGTTTGATGGTGCTGCG	downstream region

Primers used to construct vectors to express protein to raise NdhV antibody.

Name	Sequence (5'-3')	Description
ndhV-F-KpnI	CGGGGTACCGGTGGCGCTCATTCCCTTTTACG	NdhV antibody
ndhV-R-BamHI	GCCGGATCCGGGTTGCCCCCTAGCCATTTTTGA	