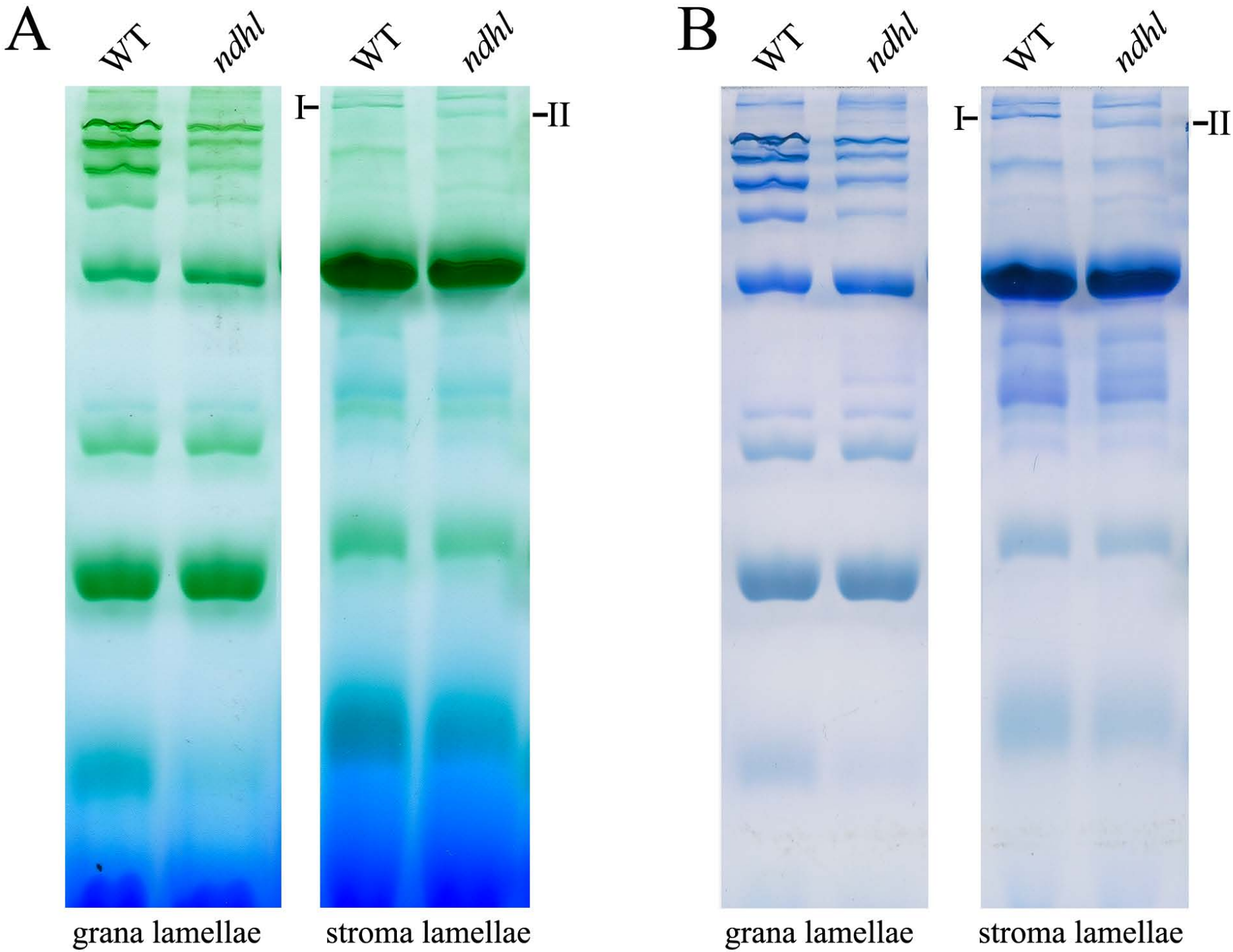
A
WT
ndhl
WT
ndhl
I
II
grana lamellae
stroma lamellae
B
WT
ndhl
WT
ndhl
I
II
grana lamellae
stroma lamellae

Supplemental Fig. 1. BN-PAGE analysis of thylakoid protein complex isolated from grana and stroma lamellae of the WT and *ndhl* plants. Grana and stroma thylakoids were first isolated from WT and *ndhl* mutant, and then membrane protein complexes were solubilized in 1% DM. Protein complexes were separated by 5%-12% BN-PAGE (A) and stained with CBB (B). High-molecular-mass green bands specific to stroma lamellae of WT (I) and *ndhl* (II) are indicated.

EXPERIMENTAL PROCEDURES FOR SUPPLEMENTAL FIG. 1

Chloroplasts were isolated and osmotically ruptured in buffer containing 10 mM Tricine/NaOH (pH 7.8), 10 mM $MgCl_2$ and 10 mM NaCl. Thylakoid membranes were pelleted by centrifugation (7700 × *g* for 3 min) and resuspended at a chlorophyll concentration of 1.5 mg mL^{-1} in the buffer containing 100 mM Tricine/NaOH (pH 7.8), 10 mM $MgCl_2$ and 10 mM NaCl. The thylakoids were mixed with equal volume of 1.65% digitonin and incubated for 3 min at room temperature. After centrifugation at 1000 × *g* for 2 min to remove the non-solubilized material, grana lamellae was pelleted by centrifugation at 10 000 × *g* for 30 min. The supernatent was used for the next step of centrifugation at 20 000 × *g* for 20 min. Transfer the supernatant to a new tube and the stroma lamellae was pelleted by centrifugation at 150 000 × *g* for 60 min. The grana lamellae and stroma lamellae were used for further BN-PAGE analysis.