

Anti-Photosystem II reaction center protein K antibody

Catalog: PHY2593A

Product Information

Description:	Rabbit polyclonal antibody
Background:	PsbK is PSII K protein, which is one of the components of the core complex of photosystem II (PSII). PSII is a light-driven water: plastoquinone oxidoreductase that uses light energy to abstract electrons from H ₂ O, generating O ₂ and a proton gradient subsequently used for ATP formation. It consists of a core antenna complex that captures photons, and an electron transfer chain that converts photonic excitation into a charge separation.
Synonyms:	PsbK, PHOTOSYSTEM II REACTION CENTER PROTEIN K PRECURSOR, PSBK.
Immunogen:	KLH-conjugated synthetic peptide (14 aa from Central section) derived from <i>Arabidopsis thaliana</i> PsbK (ATCG00070).
Form:	Lyophilized
Quantity:	150 µg
Purification:	Immunogen affinity purified
Reconstitution:	Reconstitution with 150 µl of 0.01M sterile PBS. "Note: please spin tube briefly prior to opening it to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tube".
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70°C as supplied. 6 months, -20 to -70°C under sterile conditions after reconstitution. 1 month, 2 to 8°C under sterile conditions after reconstitution.
Shipping:	The product is shipped at 4°C. Upon receipt, store it immediately at the temperature recommended above.

Application Information

Recommended Dilution:	Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user.
Expected / apparent MW:	7 / 6 kDa

Research Use Only

Confirmed Reactivity:

Arabidopsis thaliana

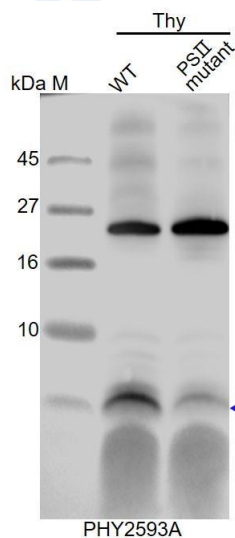
Predicted Reactivity:

Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Glycine max*, *Nicotiana tabacum*, *Vitis vinifera*, *Brassica napus*, *Populus trichocarpa*, *Gossypium raimondii*, *Medicago truncatula*, *Solanum lycopersicum*, *Cucumis sativus*, *Populus trichocarpa*, *Spinacia oleracea*, and 80-99% homologues with the sequence in *Triticum aestivum*, *Brassica rapa*, *Sorghum bicolor*, *Oryza sativa*, *Panicum virgatum*, *Setaria viridis*, *Hordeum vulgare*, *Zea mays*.

For more species homologues information, please contact tech support at tech@phytoab.com.

Application Example

Example1:



Thy-WT: thylakoid membrane protein from WT of *Arabidopsis thaliana* containing 2.5 µg of chlorophyll.

Thy-PS II : thylakoid membrane protein from an Arabidopsis mutant with low accumulation of PS II containing 2.5 µg of chlorophyll.

Electrophoresis: Tricine-SDS-PAGE

Transfer: blotting to NC (nitrocellulose) membrane for 1 h.

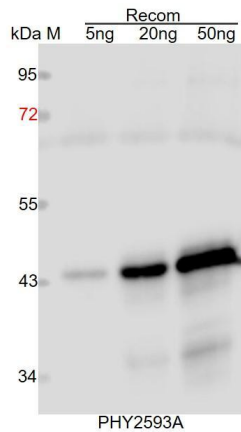
Blocking: 5% skim milk at RT or 4°C for 1 h.

Primary antibody: 1:2000 dilution overnight at 4°C.

Secondary antibody: 1:10000 dilution using Goat Anti-Rabbit IgG H&L (HRP) (Cat# PHY6000)

Detection: using chemiluminescence substrate and image were captured with CCD camera.

Example2:



Recom: 5 ng, 20 ng and 50 ng recombinant protein containing the peptide for immunization and having a molecular mass of 44 kDa.

Electrophoresis: 12% SDS-PAGE

Transfer: blotting to NC (nitrocellulose) membrane for 1 h.

Blocking: 5% skim milk at RT or 4°C for 1 h.

Primary antibody: 1:1000 dilution overnight at 4°C.

Secondary antibody: 1:10000 dilution using Goat Anti-Rabbit IgG H&L (HRP) (Cat# PHY6000).

Detection: using chemiluminescence substrate and image were captured with CCD camera.