Anti-Ferredoxin--NADP reductase, leaf isozyme 1, chloroplastic antibody

Catalog: PHY2737S

Product Information

Description:	Rabbit polyclonal antibody
Background:	Two distinct ferredoxin-NADP (+)-oxidoreductase (FNR) isoforms were found in chloroplasts of *Arabidopsis thaliana*, FNR-1 (AT5G66190) and FNR-2 (AT1G20020). The FNR proteins are present in both chloroplast stroma and thylakoid membranes in chloroplasts but are more abundant in the stroma.
Synonyms:	FNR1, ATLFNR1, FERREDOXIN-NADP (+)-OXIDOREDUCTASE 1, LEAF FNR 1, LEAF-TYPE CHLOROPLAST-TARGETED FNR 1, LFNR1
Immunogen:	KLH-conjugated synthetic peptide (19 aa from Central section) derived from *Arabidopsis thaliana* FNR1 (AT5G66190).
Form:	Lyophilized
Quantity:	150 µg
Purification:	Serum Peptide affinity form antibody available upon request at info@phytoab.com.
Reconstitution:	Reconstitution with 150 µl of sterile water. "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℃ as supplied. 6 months, -20 to -70℃ under sterile conditions after reconstitution. 1 month, 2 to 8℃ under sterile conditions after reconstitution.
Shipping:	The product is shipped at 4℃. Upon receipt, store it immediately at the temperature recommended above.

Application Information

Recommended Dilution:	Western Blot (1:1000-1:5000) Note: Optimal dilutions/concentrations should be determined by the end user.
Expected / apparent MW:	40 / 34 kDa

Confirmed Reactivity: *Arabidopsis thaliana*

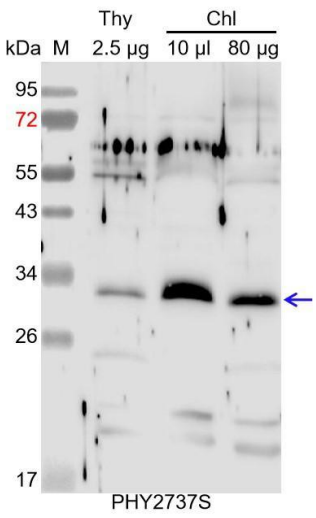
Predicted Reactivity: Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Brassica napus, Brassica rapa, Oryza sativa, Populus trichocarpa, Triticum aestivum, Glycine max*, and 80-99% homologues with the sequence in *Zea mays, Vitis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

The sequence of the synthetic peptide used for immunization is 89% homologues with the sequence in FNR2 (AT1G20020).

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

Application Example

Example 1



Thy: thylakoid membrane protein from *Arabidopsis thaliana* containing 2.5 μg of chlorophyll.
Chl: 10 μl and 80 μg total chloroplast protein from *Arabidopsis thaliana*, respectively.

Electrophoresis: 15% SDS-PAGE

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

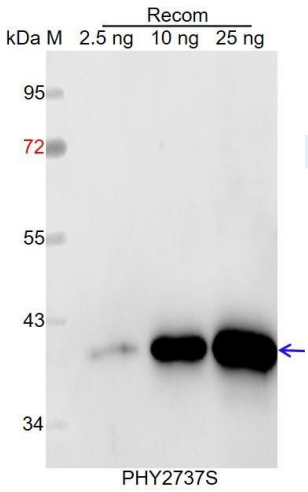
Blocking: 5% skim milk at RT or 4℃ for 1 h.

Primary antibody: 1:5000 dilution overnight at 4℃.

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.

Example 2



Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 40 kDa.

Electrophoresis: 12% SDS-PAGE

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

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

Primary antibody: 1:1000 dilution overnight at 4℃.

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.