Anti-GLN1/2 glutamine synthetase, C-terminal antibody

Catalog: PHY0029A

Product Information

Description:	Rabbit polyclonal antibody
Background:	Glutamine synthetase catalyses the synthesis of glutamine from glutamate and ammonia, which is one of the key enzymes involved in nitrogen metabolism of plants. Two classes of glutamine synthetase are present in plants, cytosolic form (GLN1) and chloroplastic form (GLN2). While GLN1 is encoded by five genes (AT5G37600, AT1G66200, AT3G17820, AT5G16570, AT1G48470), GLN2 is encoded by a single gene (AT5G35630).
Synonyms:	GLN1/2.
Immunogen:	KLH-conjugated synthetic peptide (15 aa from C terminal section) derived from *Arabidopsis thaliana* GLN1-1 (AT5G37600), GLN1-2 (AT1G66200), GLN1-3 (AT3G17820) and GLN1-5 (AT1G48470).
Form:	Lyophilized
Quantity:	150 µg
Purification:	Immunogen affinity purified
Reconstitution:	Reconstitution with 150 µl of 0.01 M 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℃ 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 (1:1000-1:4000) Note: Optimal dilutions/concentrations should be determined by the end user.
Expected / apparent MW:	39-40 kDa (GLN1,cytoplasmic form), 44-45 kDa (GLN2, chloroplastic form)

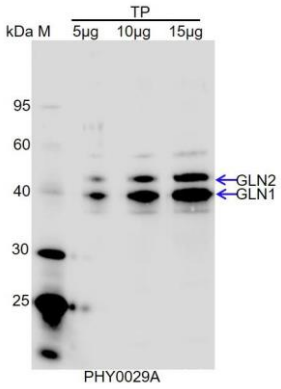
Confirmed Reactivity: *Arabidopsis thaliana*

Predicted Reactivity: Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Solanum tuberosum*, *Zea mays*, *Solanum lycopersicum*, *Spinacia oleracea*, *Brassica napus*, *Brassica rapa*, *Panicum virgatum*, *Oryza sativa Japonica Group*, *Setaria viridis*, *Vitis vinifera*, *Populus trichocarpa*, *Nicotiana tabacum,* and 80-99% homologues with the sequence in *Sorghum bicolor*, *Gossypium raimondii*, *Triticum aestivum*, *Physcomitrium patens*, *Cucumis sativus.*

The sequence of the synthetic peptide used for immunization is 86% homologues with the sequence in GLN2 (AT5G35630).

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

Application Example



TP: 5 μg, 10 μg, 15 μg total protein from *Arabidopsis thaliana*.

Electrophoresis: 15% SDS-Urea-PAGE

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

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

Primary antibody: 1:4000 dilution overnight at 4℃.

Secondary antibody: 1:20000 dilution using Goat Anti-Rabbit IgG H&L(HRP) (Cat# PHY6000).

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