Anti-GS2, chloroplastic form of glutamine synthetase, C-terminal antibody

Catalog: PHY3449S

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) andchloroplastic form (GLN2). While GLN1 is encoded by five genes (AT5G37600, AT1G66200, AT3G17820, AT5G16570, AT1G48470), GLN2 is encoded by a single gene (AT5G35630).
Synonyms:	GLN2, ATGSL1, GLUTAMINE SYNTHETASE 2, GLUTAMINE SYNTHETASE LIKE 1, GS2
Immunogen:	KLH-conjugated synthetic peptide (15 aa from C terminal section) derived from *Arabidopsis thaliana* GLN2 (AT5G35630).
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 (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user.

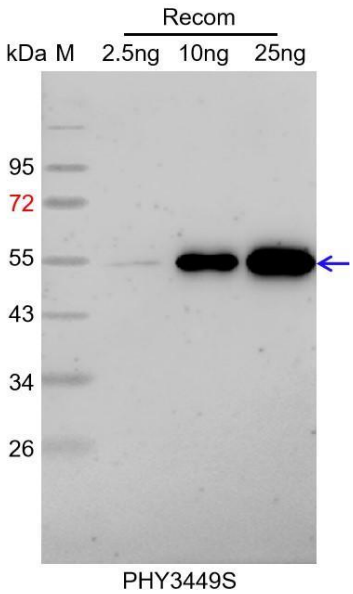
Expected / apparent MW: 47 kDa

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

The sequence of the synthetic peptide used for immunization is 86% (12/14) homologues with the sequence in GLN1;2 (AT1G66200), GLN1;1 (AT5G37600), GLN1;3 (AT3G17820) and GLN1;4 (AT5G16570).

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

Application Example



Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 55 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.