

Anti-Chlorophyll synthase, chloroplastic antibody

Catalog: PHY2965A

Product Information

Description:	Rabbit polyclonal antibody
Background:	ATG4 is a protein with chlorophyll synthase activity. This enzyme has been shown to perform the esterification of chlorophyllide (a and b), the last step of chlorophyll biosynthesis. Although it can use either geranylgeranyl pyrophosphate (GGPP) or phytol pyrophosphate (PhyPP) as substrates, the esterification reaction was faster with GGPP than with PhyPP.
Synonyms:	ATG4, Arabidopsis Chl, CHLG, G4, PDE325, PIGMENT DEFECTIVE 325.
Immunogen:	KLH-conjugated synthetic peptide (19 aa from Central section) derived from <i>Arabidopsis thaliana</i> ATG4 (AT3G51820).
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°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

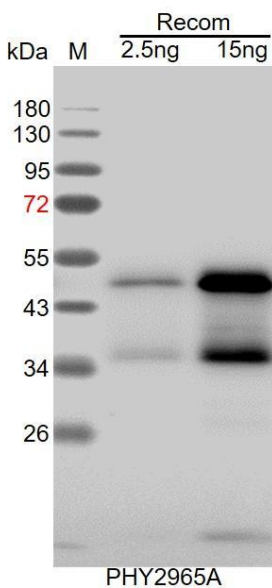
Applications:	Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user.
Expected Results:	42 kDa
Predicted Reactivity:	Among species analyzed the sequence of the synthetic peptide used for immunization is 100% homologous with the sequence in <i>Brassica napus</i> , <i>Brassica rapa</i> , <i>Setaria viridis</i> , <i>Zea mays</i> , <i>Panicum virgatum</i> ,

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Sorghum bicolor, *Triticum aestivum*, *Hordeum vulgare*, *Oryza sativa*, *Spinacia oleracea*, and 80-99% homologues with the sequence in *Glycine max*, *Physcomitrium patens*, *Vitis vinifera*, *Chlamydomonas reinhardtii*, *Gossypium raimondii*, *Medicago truncatula*, *Cucumis sativus*, *Nicotiana tabacum*, *Vitis vinifera*, *Solanum tuberosum*, *Solanum lycopersicum*, *Populus trichocarpa*.

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

Application Example



Recom: 2.5 ng and 15 ng recombinant protein containing the peptide for immunization and having a molecular mass of 50 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.