Anti-Probable zinc metalloprotease EGY1, chloroplastic antibody

Catalog: PHY2869A

Product Information

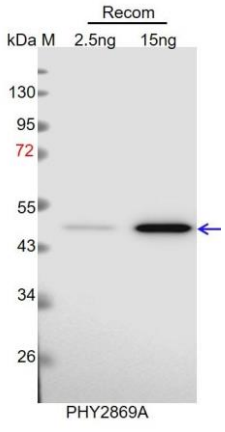
Description:	Rabbit polyclonal antibody
Background:	Membrane-associated and ATP-independent metalloprotease; EGY1 protein contains eight trans-membrane domains at its C-terminus, and carries out beta-casein degradation in an ATP-independent manner. EGY1 is required for development of both thylakoid grana and a well-organized lamellae system in chloroplast. Additionally, EGY1 is required for the accumulation of chlorophyll and chlorophyll a/b binding (CAB) proteins (both PS I and PS II) in chloroplast membranes, and for grana formation and normal chloroplast development. Loss of EGY1 function also has an effect on endodermal plastid biogenesis. Mutant studies suggest that EGY1 is involved in the regulation of nuclear gene expression response to ammonium stress and interacts with ABA signaling.
Synonyms:	EGY1, AMMONIUM OVERLY SENSITIVE 1, AMOS1, ENHANCER OF VARIEGATION3, ETHYLENE-DEPENDENT GRAVITROPISM-DEFICIENT AND YELLOW-GREEN 1, EVR3
Immunogen:	KLH-conjugated synthetic peptide (16 aa from N terminal section) derived from *Arabidopsis thaliana* EGY1 (AT5G35220).
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℃ 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:	59 kDa
Confirmed Reactivity:	Coming soon
Predicted Reactivity:	Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Setaria viridis, Zea mays, Glycine max, Brassica rapa, Brassica napus, Populus trichocarpa, Sorghum bicolor, Cucumis sativus, Gossypium raimondii, Panicum virgatum*, and 80-99% homologues with the sequence in *Spinacia oleracea, Vitis vinifera, Nicotiana tabacum, Solanum lycopersicum, Solanum tuberosum, Spinacia oleracea, Oryza sativa Japonica Group, Hordeum vulgare, Triticum aestivum, Medicago truncatula, Physcomitrium patens*. For more species homologues information, please contact tech support at tech@phytoab.com.

Application Example

Example1:



Recom: 5ng and 15 ng recombinant protein containing the peptide for immunization and having a molecular mass of 47 kDa.

Electrophoresis: 12% SDS-PAGE

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

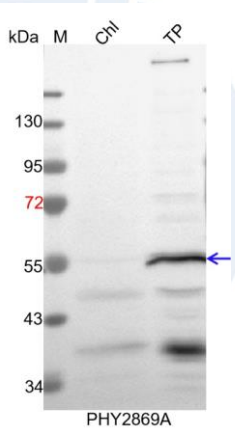
Blocking: 5% skim milk at RT or 4℃for 1 h.

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.

Example2:



Chl: 8 μg total chloroplast protein from *Arabidopsis thaliana*.
TP: 30 μg total protein from *Arabidopsis thaliana*.

Electrophoresis: 10% 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.