

# Anti-Chloroplastic DegP-type serine protease 1 antibody

Catalog: PHY0146A

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	Deg1 is a nuclear gene encoding chloroplast-targeted protease that can degrade two luminal proteins, plastocyanin and OE33, suggesting a role as a general-purpose protease in the thylakoid lumen. It is involved in the degradation of D1 protein of PS II, hence participating in the repair of PS II damages caused by photoinhibition.
<b>Synonyms:</b>	Deg1, DEG1, DEGP PROTEASE 1, DEGP1, DEGRADATION OF PERIPLASMIC PROTEINS 1
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (14 aa from Central section) derived from <i>Arabidopsis thaliana</i> Deg1 (AT3G27925).
<b>Form:</b>	Lyophilized
<b>Quantity:</b>	150 µg
<b>Purification:</b>	Immunogen affinity purified
<b>Reconstitution:</b>	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".
<b>Stability &amp; Storage:</b>	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.
<b>Shipping:</b>	The product is shipped at 4°C. Upon receipt, store it immediately at the temperature recommended above.

## Application Information

<b>Recommended Dilution:</b>	Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user.
<b>Expected / apparent MW:</b>	47 / 36 kDa

Research Use Only

**Confirmed Reactivity:**

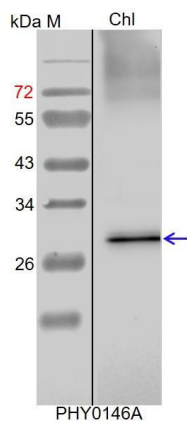
*Arabidopsis thaliana*

**Predicted Reactivity:**

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

For more species homologues information, please contact tech support at [tech@phytoab.com](mailto:tech@phytoab.com).

## Application Example



Chl: 80 µg total chloroplast protein from *Arabidopsis thaliana*.

**Electrophoresis:** 15% 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:** 1:2000 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.