

# Anti-Chlorophyll synthase, chloroplastic antibody

Catalog: PHY0948S

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	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 phytyl pyrophosphate (PhyPP) as substrates, the esterification reaction was faster with GGPP than with PhyPP.
<b>Synonyms:</b>	ATG4, Arabidopsis Chl, CHLG, G4, PDE325, PIGMENT DEFECTIVE 325.
<b>Immunogen:</b>	KLH-conjugated synthetic peptide of ATG4 derived from <i>Arabidopsis thaliana</i> AT3G51820.
<b>Form:</b>	Lyophilized
<b>Quantity:</b>	150 µg
<b>Purification:</b>	Serum Peptide affinity form antibody available upon request at <a href="mailto:info@phytoab.com">info@phytoab.com</a> .
<b>Reconstitution:</b>	Reconstitution with 150µl 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".
<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>Applications:</b>	Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user.
<b>Expected Results:</b>	42 / 35 kDa
<b>Confirmed Reactivity:</b>	<i>Arabidopsis thaliana</i>

Research Use Only

**Predicted Reactivity:**

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

**Application Example**

**Example 1**



Lane 1: 20 µg total protein from *Arabidopsis thaliana* leaf.  
 Lane 2: 40 µg total protein from *Arabidopsis thaliana* leaf.  
 Lane 3: 80 µg total protein from *Arabidopsis thaliana* leaf.

**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.

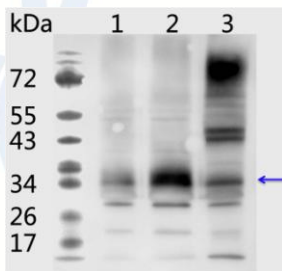
**PHY0948S**

**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.

**Example 2**



Lane 1-2 is thylakoid membrane protein from *Arabidopsis thaliana* leaf containing 2.5 µg, and 5 µg of chlorophyll, respectively.

Lane 3: 80 µg total protein from *Arabidopsis thaliana* leaf.

**Electrophoresis:** 15% SDS-Urea-PAGE

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

**PHY0948S**

**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.