

# Anti- 7-hydroxymethyl chlorophyll a reductase, chloroplastic antibody

Catalog: PHY2765A

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	HCAR is a probable iron-sulfur flavoprotein that converts 7-hydroxymethyl chlorophyll a to chlorophyll a using ferredoxin as a reducing equivalent. It catalyzes the reduction of a hydroxymethyl group to a methyl group. Belongs to the chlorophyll catabolic enzymes (CCEs).
<b>Synonyms:</b>	HCAR , 7-HYDROXYMETHYL CHLOROPHYLL A (HMCHL) REDUCTASE
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (18 aa from Central section) derived from <i>Arabidopsis thaliana</i> HCAR (AT1G04620).
<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

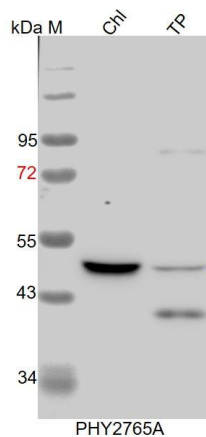
<b>Recommended Dilution:</b>	Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user.
<b>Expected / apparent MW:</b>	52 / 50 kDa
<b>Confirmed Reactivity:</b>	<i>Arabidopsis thaliana</i>
<b>Predicted Reactivity:</b>	Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in <i>Brassica napus</i> ,

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*Brassica rapa*, and 80-99% homologues with the sequence in *Zea mays*, *Panicum virgatum*, *Oryza sativa*, *Hordeum vulgare*, *Sorghum bicolor*, *Setaria viridis*, *Triticum aestivum*, *Spinacia oleracea*, *Gossypium raimondii*, *Cucumis sativus*, *Solanum tuberosum*, *Solanum lycopersicum*, *Vitis vinifera*, *Nicotiana tabacum*, *Glycine max*, *Populus trichocarpa*, *Medicago truncatula*, *Physcomitrium patens*.  
For more species homologues information, please contact tech support at [tech@phytoab.com](mailto:tech@phytoab.com).

## Application Example

### Example1:



Chl: 7.5 µg total chloroplast protein from *Arabidopsis thaliana*.

TP: 15 µg total protein from *Arabidopsis thaliana*.

**Electrophoresis:** 12% SDS-PAGE

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

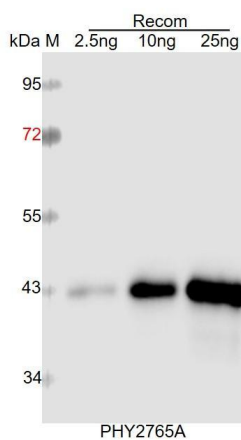
**Blocking:** 5% skim milk at RT or 4°C for 1 h.

**Primary antibody:** 1:2000 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.

### Example2:



Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 43 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.