

# Anti-1-deoxy-D-xylulose-5-phosphate synthase, chloroplastic antibody

Catalog: PHY0848S

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	CLA1 is a protein with 1-deoxyxylulose 5-phosphate synthase activity involved in the MEP pathway. It is essential for chloroplast development in Arabidopsis. It is a limiting enzyme for plastidic isoprenoid biosynthesis and essential for chloroplast development.
<b>Synonyms:</b>	CLA1, DXS, AtDXS, DEF, 1-DEOXY-D-XYLULOSE 5-PHOSPHATE (DXP) SYNTHASE 1, 1-DEOXY-D-XYLULOSE 5-PHOSPHATE SYNTHASE, 1-DEOXY-D-XYLULOSE 5-PHOSPHATE SYNTHASE 2, ATCLA1, CLA, CLOROPLASTOS ALTERADOS 1, DXPS2, DXS1.
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (17 aa from Central section) derived from <i>Arabidopsis thaliana</i> CLA1 (AT4G15560).
<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 150 µl 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>Recommended Dilution:</b>	Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user.
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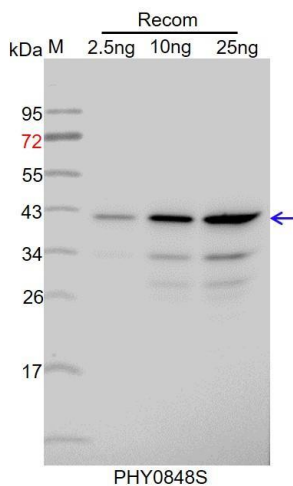
Research Use Only

**Expected / apparent MW:** 77 kDa

**Predicted Reactivity:** Among species analyzed, the sequence of the synthetic peptide used for immunization is 80-99% homologues with the sequence in *Brassica napus*, *Brassica rapa*, *Glycine max*, *Vitis vinifera*, *Gossypium raimondii*, *Populus trichocarpa*, *Solanum tuberosum*, *Solanum lycopersicum*, *Cucumis sativus*, *Nicotiana tabacum*, *Medicago truncatula*, *Spinacia oleracea*.

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

## Application Example



Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 42 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.