

# Anti-ATP sulfurylase 1/2, chloroplastic antibody

Catalog: PHY2849A

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	Plants assimilate inorganic sulfate into sulfur-containing vital metabolites. ATP sulfurylase (ATPS) is the enzyme catalyzing the key entry step of the sulfate assimilation pathway in both plastids and cytosol in plants. <i>Arabidopsis thaliana</i> has four ATPS: ATPS1 (AT3G22890), ATPS2 (AT1G19920), ATPS3 (AT4G14680), and ATPS4 (AT5G43780).
<b>Synonyms:</b>	APS1/2, ATP SULFURYLASE 1/2, ATPS1/2
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (18 aa from C terminal section) derived from <i>Arabidopsis thaliana</i> APS1 (AT3G22890), APS2 (AT1G19920).
<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>	51 / 45 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</i>

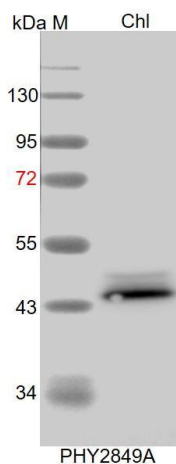
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*napus, Brassica rapa, Medicago truncatula, Panicum virgatum, Gossypium raimondii, Glycine max, Zea mays, Sorghum bicolor, Nicotiana tabacum, Physcomitrium patens, Cucumis sativus, Populus trichocarpa, Gossypium raimondii, Hordeum vulgare, Setaria viridis, Triticum aestivum, Oryza sativa, Spinacia oleracea, Solanum tuberosum, Vitis vinifera, Solanum lycopersicum.*

The sequence of the synthetic peptide used for immunization is 94% homologues with the sequence in APS3 (AT4G14680) and APS4(AT 5G43780).

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

## Application Example



7.5 µg total chloroplast 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.