

Anti-Serine hydroxymethyltransferase 1, mitochondrial antibody

Catalog: PHY2883S

Product Information

Description:	Rabbit polyclonal antibody
Background:	Serine hydroxymethyltransferases (SHMs) are important enzymes of cellular one-carbon metabolism and are essential for the photorespiratory glycine-into-serine conversion in leaf mesophyll mitochondria. SHM1 is functions in the photorespiratory pathway, catalyzes the conversion of serine and tetrahydrofolate to glycine and 5,10-methylene tetrahydrofolate. And SHM2 is thought to be localized in the mitochondrial matrix.
Synonyms:	SHM1, SERINE HYDROXYMETHYLTRANSFERASE 1, SERINE TRANSHYDROXYMETHYLTRANSFERASE, SERINE TRANSHYDROXYMETHYLTRANSFERASE 1, SHMT1, STM
Immunogen:	KLH-conjugated synthetic peptide (15 aa from Central Section) derived from <i>Arabidopsis thaliana</i> SHM1 (AT4G37930).
Form:	Lyophilized
Quantity:	150 µg
Purification:	Serum Peptide affinity form antibody available upon request at info@phytoab.com .
Reconstitution:	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".
Stability &	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
Storage:	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.
Shipping:	The product is shipped at 4°C. Upon receipt, store it immediately at the temperature recommended above.

Application Information

Recommended Dilution:	Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the
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Research Use Only

end user.

Expected / apparent MW:

57 kDa

Confirmed Reactivity:

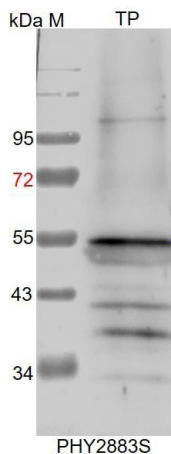
Arabidopsis thaliana

Predicted Reactivity:

Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Brassica napus*, *Brassica rapa*, *Spinacia oleracea*, *Medicago truncatula*, and 80-99% homologues with the sequence in *Physcomitrium patens*, *Glycine max*, *Nicotiana tabacum*, *Solanum tuberosum*, *Solanum lycopersicum*, *Populus trichocarpa*, *Vitis vinifera*, *Gossypium raimondii*, *Oryza sativa*.

For more species homologues information, please contact tech support at tech@phytoab.com.

Application Example



TP: 20 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: 1:1000 dilution overnight at 4°C.

Secondary antibody: 1:10000 dilution using Goat Anti-Rabbit IgG &L (HRP) (Cat# PHY6000).

Detection: using chemiluminescence substrate and image were captured with CCD camera.