

# Anti-Serine hydroxymethyltransferase (SHMT) antibody

Catalog: PHY0071A

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	Serine hydroxymethyltransferase (SHMT) catalyzes the reversible conversion of serine and tetrahydrofolate (THF) to glycine and 5,10-methylene THF. The Arabidopsis genome contains seven genes (SHM1 to SHM7).
<b>Synonyms:</b>	SHMT
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (15 aa from Central section) derived from <i>Zea mays</i> SHMT (Zm00001d042661).
<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>	64 / 52 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>Zea mays</i> , <i>Oryza sativa</i> , <i>Sorghum bicolor</i> , and 80-99% homologues with

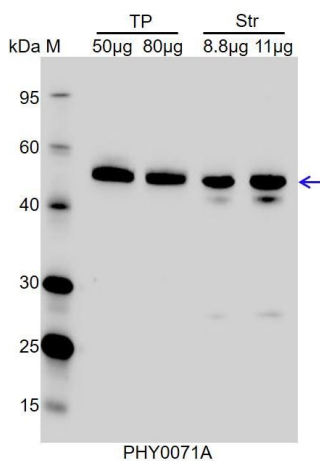
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the sequence in *Triticum aestivum*, *Hordeum vulgare*, *Glycine max*, *Brassica rapa*, *Brassica napus*, *Panicum virgatum*, *Setaria viridis*, *Populus trichocarpa*, *Sorghum bicolor*, *Physcomitrium patens*, *Gossypium raimondii*, *Solanum tuberosum*, *Medicago truncatula*, *Vitis vinifera*, *Spinacia oleracea*.

The sequence of the synthetic peptide used for immunization is 93% homologues with the sequence in the SHM5 (AT4G13890), 87% with SHM4 (AT4G13930), 80% with SHM6 (AT1G22020) in *Arabidopsis thaliana*.

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

## Application Example



TP: 50 µg 80 µg and total protein from *Arabidopsis thaliana* leaf.

Str: 8.8 µg and 11 µg stromal protein from *Arabidopsis thaliana* leaf.

**Electrophoresis:** 15% SDS-Urea-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:** 1:20000 dilution using Goat Anti-Rabbit IgG H&L (HRP) (Cat# PHY6000).

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