

# Anti-Malate dehydrogenase 1, cytoplasmic antibody

Catalog: PHY2305S

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	Malate dehydrogenase (MDH) catalyzes a reversible NAD(+)-dependent-dehydrogenase reaction involved in central metabolism and redox homeostasis between organelle compartments.
<b>Synonyms:</b>	C-NAD-MDH1, CYTOSOLIC-NAD-DEPENDENT MALATE DEHYDROGENASE 1
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (16 aa from Central section) derived from <i>Arabidopsis thaliana</i> C-NAD-MDH1 (AT1G04410).
<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.
<b>Expected / apparent MW:</b>	36 kDa
<b>Confirmed Reactivity:</b>	<i>Arabidopsis thaliana</i>
<b>Predicted Reactivity:</b>	Among species analyzed, the sequence of the synthetic peptide used

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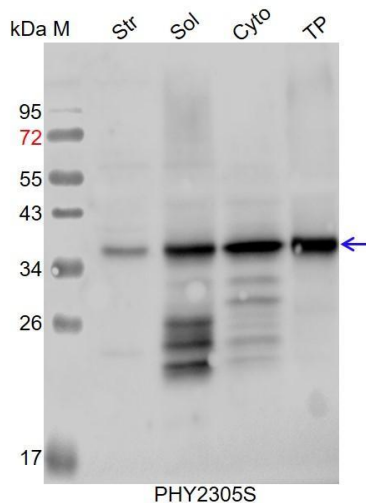
for immunization is 100% homologues with the sequence in *Brassica napus*, *Brassica rapa*, and 80-99% homologues with the sequence in *Populus trichocarpa*, *Zea mays*, *Cucumis sativus*, *Triticum aestivum*, *Hordeum vulgare*, *Spinacia oleracea*, *Setaria viridis*, *Solanum tuberosum*, *Nicotiana tabacum*, *Solanum lycopersicum*, *Medicago truncatula*, *Panicum virgatum*, *Gossypium raimondii*, *Oryza sativa*, *Sorghum bicolor*.

The sequence of the synthetic peptide used for immunization is 81% (13 / 16) homologues with the sequence in C-NAD-MDH2 (AT5G43330).

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

## Application Example

### Example1:



Str: 12 µg stromal protein from *Arabidopsis thaliana*.

Sol: 20 µg soluble protein from *Arabidopsis thaliana*.

Cyto: 15 µg cytosolic protein from *Arabidopsis thaliana*.

TP: 20 µg total protein from *Arabidopsis thaliana*.

**Electrophoresis:** 15% SDS-PAGE

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

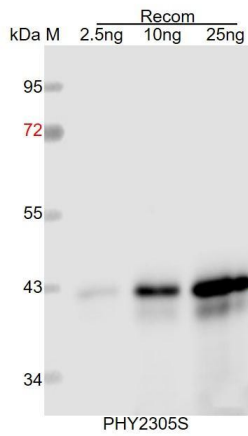
**Blocking:** 5% skim milk at RT or 4°C for 1 h.

**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.

## 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.