# Anti-Malate dehydrogenase 1, cytoplasmic antibody

**Catalog:** PHY2306S

## Product Information

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| **Description:** | Rabbit polyclonal antibody |
| **Background:** | Malate dehydrogenase (MDH) catalyzes a reversible NAD(+)-dependent-dehydrogenase reaction involved in central metabolism and redox homeostasis between organelle compartments. |
| **Synonyms:** | C-NAD-MDH1, CYTOSOLIC-NAD-DEPENDENT MALATE DEHYDROGENASE 1 |
| **Immunogen:** | KLH-conjugated synthetic peptide (16 aa from C terminal section) derived from *Arabidopsis thaliana* C-NAD-MDH1 (AT1G04410). |
| **Form:** | Lyophilized |
| **Quantity:** | 150 µg |
| **Purification:** | Serum<br>Peptide affinity form antibody available upon request at info@phytoab.com. |
| **Reconstitution:** | Reconstitution with 150 µl of sterile water.<br>"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 & Storage:** | Use a manual defrost freezer and avoid repeated freeze-thaw cycles.<br>12 months from date of receipt, -20 to -70℃ as supplied.<br>6 months, -20 to -70℃ under sterile conditions after reconstitution.<br>1 month, 2 to 8℃ under sterile conditions after reconstitution. |
| **Shipping:** | The product is shipped at 4℃. Upon receipt, store it immediately at the temperature recommended above. |

## Application Information

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| **Recommended Dilution:** | Western Blot (1:1000-1:2000)<br>Note: Optimal dilutions/concentrations should be determined by the end user. |
| **Expected / apparent MW:** | 36 kDa |
| **Confirmed Reactivity:** | *Arabidopsis thaliana* |
| **Predicted Reactivity:** | Among species analyzed, the sequence of the synthetic peptide used for immunization is 80-99% homologues with the sequence in |

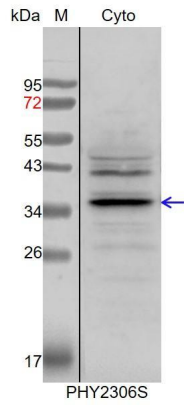
*Brassica rapa*, *Brassica napus, Medicago truncatula*, *Zea mays*, *Sorghum bicolor*, *Glycine max*, *Cucumis sativus*, *Vitis vinifera*, *Solanum tuberosum*, *Populus trichocarpa*, *Nicotiana tabacum*, *Solanum lycopersicum*, *Panicum virgatum*, *Triticum aestivum*, *Hordeum vulgare*, *Setaria viridis*,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

The sequence of the synthetic peptide used for immunization is 88% (14/16) homologues with the sequence in C-NAD-MDH2 (AT5G43330).

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

## Application Example

### Example1:




Cyto: 10 μg cytosolic protein from *Arabidopsis thaliana*.

**Electrophoresis:** 15% SDS-PAGE

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

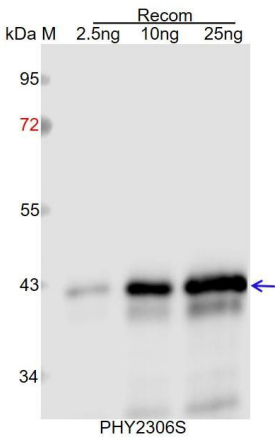
**Blocking:** 5% skim milk at RT or 4℃ for 1 h.

**Primary antibody:** 1:1000 dilution overnight at 4℃.

**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 42 kDa.

**Electrophoresis:** 12% SDS-PAGE

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

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

**Primary antibody:** 1:1000 dilution overnight at 4℃.

**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.