

# Anti-Proline dehydrogenase 1, mitochondrial antibody

Catalog: PHY0969A

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	Proline accumulation is one of the sensitive metabolic responses to extreme conditions; it is triggered by salinity or drought and is regulated by light. P5CS1 (AT2G39800) and PDH1 (AT3G30775) is essential for salt-induced proline accumulation. They control proline biosynthetic and catabolic pathways, respectively.
<b>Synonyms:</b>	ERD5, ARABIDOPSIS THALIANA PROLINE OXIDASE, AT-POX, ATPDH, ATPOX, EARLY RESPONSIVE TO DEHYDRATION 5, PDH1, PRO1, PRODH, PROLINE DEHYDROGENASE, PROLINE DEHYDROGENASE 1
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (16 aa from C terminal section) derived from <i>Arabidopsis thaliana</i> ERD5 (AT3G30775).
<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>	55 kDa

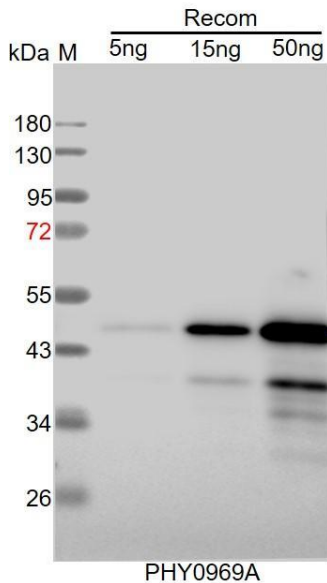
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### Predicted Reactivity:

Among species analyzed, the sequence of the synthetic peptide used for immunization is 80-99% homologues with the sequence in *Brassica napus*, *Brassica rapa*.

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

### Application Example



Recom: 5 ng, 15 ng and 50 ng recombinant protein containing the peptide for immunization and having a molecular mass of 50 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:** 1:2000 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.