

# Anti-Nitrate reductase [NADH] 2 antibody

Catalog: PHY1433A

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	Nitrate reductase is a key enzyme involved in the first step of nitrate assimilation in plants, fungi and bacteria. In Arabidopsis, nitrate reductases are including NIA1 (AT1G77760) and NIA2 (AT1G37130), they determine NO production in plants and are critical to abscisic acid (ABA)-induced stomatal closure.
<b>Synonyms:</b>	NR2, NIA2, ARABIDOPSIS NITRATE REDUCTASE 2, ATNR2, B29, CHL3, CHLORATE RESISTANT 3, NIA2-1, NITRATE REDUCTASE, NITRATE REDUCTASE 2, NR
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (13 aa from Central section) derived from <i>Arabidopsis thaliana</i> NR2 (AT1G37130).
<b>Form:</b>	Lyophilized
<b>Quantity:</b>	150 µg
<b>Purification:</b>	Immunogen affinity purified
<b>Reconstitution:</b>	Reconstitution with 150 µl of sterile 1XPBS (PH=7.4). "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.
<b>Reference:</b>	Shane C. HARDIN, et al., Biochem. J. (2009) 422, 305–312.

## 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>	103 kDa

Research Use Only

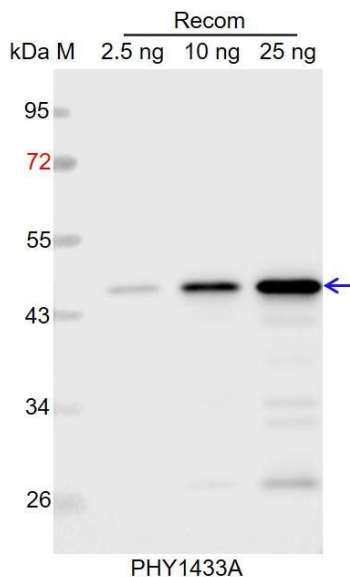
### Predicted Reactivity:

Among species analyzed, the sequence of the synthetic peptide used for immunization is 80-99% homologues with the sequence in *Brassica napus*, *Brassica rapa*, *Populus trichocarpa*, *Glycine max*, *Cucumis sativus*, *Solanum tuberosum*, *Solanum lycopersicum*, *Nicotiana tabacum*, *Vitis vinifera*, *Gossypium raimondii*, *Sorghum bicolor*, *Zea mays*, *Setaria viridis*, *Panicum virgatum*.

The sequence of the synthetic peptide used for immunization is 85% (11 / 13) homologues with the sequence in NR1 (AT1G77760).

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

### Application Example



Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 45 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.