

# Anti-Plant alternative oxidase 1/2 antibody

Catalog: PHY2212A

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	The cyanide-insensitive alternative oxidase (AOX) is a non-proton-pumping ubiquinol oxidase that catalyzes the reduction of oxygen to water and is posttranslationally regulated by redox mechanisms and 2-oxo acids. Arabidopsis possesses five AOX isoforms, and are AOX1A (AT3G22370), AOX1B (AT3G22360), AOX1C (AT3G27620), AOX1D (AT1G32350) and AOX2 (AT5G64210).
<b>Synonyms:</b>	AOX1/2
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (19 aa from C terminal section) derived from <i>Arabidopsis thaliana</i> AOX1A (AT3G22370), AOX1B (AT3G22360), AOX1C (AT3G27620), AOX1D (AT1G32350) and AOX2 (AT5G64210).
<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;</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
<b>Storage:</b>	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>	40 kDa (AT5G64210, AT3G22370), 38 kDa (AT3G27620), 36 kDa (AT1G32350), 37 kDa (AT3G22360)

Research Use Only

**Confirmed Reactivity:**

*Arabidopsis thaliana*

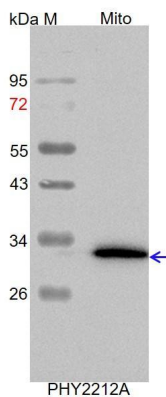
**Predicted Reactivity:**

Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Solanum lycopersicum*, *Solanum tuberosum*, *Physcomitrium patens*, *Nicotiana tabacum*, *Brassica rapa*, *Brassica napus*, *Spinacia oleracea*, *Populus trichocarpa*, *Gossypium raimondii*, *Medicago truncatula*, *Vitis vinifera*, *Glycine max*, and 80-99% homologues with the sequence in *Oryza sativa*, *Triticum aestivum*, *Zea mays*, *Hordeum vulgare*.

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

## Application Example

### Example1:



Mito: 7.5 µg mitochondria protein from *Arabidopsis thaliana*.

**Electrophoresis:** 15% SDS-PAGE

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

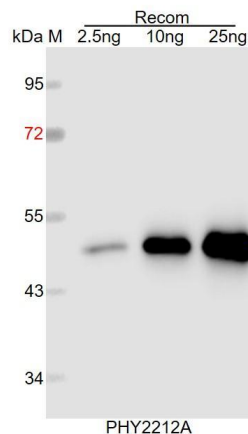
**Blocking:** 5% skim milk at RT or 4°C for 1 h.

**Primary antibody:** 1:2000 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.

### Example2:



Recom: 2.5 ng, 10 ng and 25 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:** 1:1000 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.