

# Anti-Alpha subunit of chloroplast ATP synthase antibody

Catalog: PHY3003S

#### **Product Information**

**Description:** Rabbit polyclonal antibody

**Background:** ATPA is ATPase alpha subunit, which is a subunit of ATP synthase and part of

the CF1 portion which catalyzes the conversion of ADP to ATP using the proton

motive force. This complex is located in the thylakoid membrane of the

chloroplast.

Synonyms: ATPA, ATP SYNTHASE SUBUNIT ALPHA

Immunogen: KLH-conjugated synthetic peptide (18 aa from C terminal section) derived from

Arabidopsis thaliana ATPA (ATCG00120).

Form: Lyophilized

**Quantity**: 150 μg

Purification: Serum

Peptide affinity form antibody available upon request at <a href="mailto:info@phytoab.com">info@phytoab.com</a>.

**Reconstitution:** 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".

**Stability &**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

**Storage:** 12 months from date of receipt, -20 to  $-70^{\circ}$ 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.

**Shipping:** The product is shipped at 4°C. Upon receipt, store it immediately at the

temperature recommended above.

#### **Application Information**

**Recommended Dilution:** Western Blot (1:1000-1:5000)

Note: Optimal dilutions/concentrations should be determined by the

end user.

Expected / apparent MW: 55 kDa

Predicted Reactivity: Among species analyzed, the sequence of the synthetic peptide used

for immunization is 100% homologues with the sequence in Glycine



max, Brassica rapa, Physcomitrium patens, Solanum lycopersicum, Vitis vinifera, Gossypium raimondii, Brassica napus, Cucumis sativus, Solanum tuberosum, Nicotiana tabacum, and 80-99% homologues with the sequence in Zea mays, Medicago truncatula, Panicum virgatum, Oryza sativa, Populus trichocarpa, Triticum aestivum, Spinacia oleracea, Leymus chinensis, Hordeum vulgare, Chlamydomonas reinhardtii.

For more species homologues information, please contact tech support at <a href="tech@phytoab.com">tech@phytoab.com</a>.

## Application Example Example1:

Thy: thylakoid membrane protein from *Arabidopsis thaliana* containing 0.5 μg of chlorophyll.

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:** 1:5000 dilution overnight at 4°C.

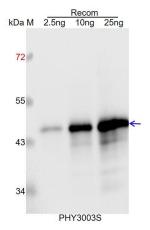
Secondary antibody: 1:10000 dilution using Goat Anti-Rabbit IgG &L (HRP) (Cat#

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 46 kDa.

Electrophoresis: 12% SDS-PAGE

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

**Blocking:** 5% skim milk at RT or  $4^{\circ}$ 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.



