

# Anti-Beta subunit of chloroplast ATP synthase antibody

Catalog: PHY0011A

## Product Information

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Rabbit polyclonal antibody  |
| <b>Background:</b>              | ATPase beta 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.   |
| <b>Synonyms:</b>                | AtpB, ATP synthase subunit beta, chloroplastic, ATP synthase F1 sector subunit beta, F-ATPase subunit beta.   |
| <b>Immunogen:</b>               | KLH-conjugated synthetic peptide (15 aa from N terminal section) derived from <i>Arabidopsis thaliana</i> AtpB (ATCG00480).   |
| <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.<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".  |
| <b>Stability &amp; Storage:</b> | Use a manual defrost freezer and avoid repeated freeze-thaw cycles.<br>12 months from date of receipt, -20 to -70°C as supplied.<br>6 months, -20 to -70°C under sterile conditions after reconstitution.<br>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

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| <b>Recommended Dilution:</b>   | Western Blot (1:1000-1:2000)<br>Note: Optimal dilutions/concentrations should be determined by the end user.   |
| <b>Expected / apparent MW:</b> | 54 / 56 kDa  |
| <b>Confirmed Reactivity:</b>   | <i>Arabidopsis thaliana</i>  |
| <b>Predicted Reactivity:</b>   | Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in <i>Vitis vinifera</i> , <i>Brassica napus</i> , <i>Zea mays</i> , <i>Medicago truncatula</i> , <i>Brassica</i> |

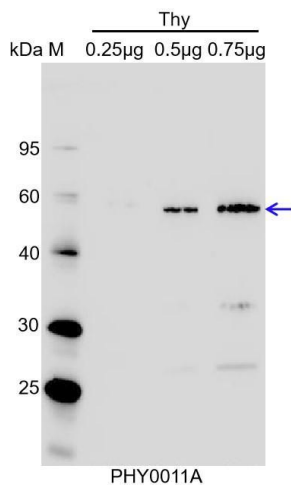
Research Use Only

*rapa, Triticum aestivum, Glycine max, Oryza sativa, Solanum tuberosum, Solanum lycopersicum, Hordeum vulgare, Setaria viridis, Populus trichocarpa, Sorghum bicolor, Nicotiana tabacum, Gossypium raimondii, Spinacia oleracea, Panicum virgatum, Cucumis sativus, Leymus chinensis, Physcomitrella patens.*

The sequence of the synthetic peptide used for immunization is also 93% homologues with the sequence in mitochondrial ATP synthase beta subunit At5g08670, At5g08680, At5g08690.

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

## Application Example



Thy: thylakoid membrane protein from *Arabidopsis thaliana* leaf containing 0.25 µg, 0.5 µg, and 0.75 µg of chlorophyll, respectively.

**Electrophoresis:** 15% SDS-Urea-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:** 1:20000 dilution using Goat Anti-Rabbit IgG H&L (HRP) (Cat# PHY6000).

**Detection:** using chemiluminescence substrate and image were captured with CCD camera.