

# Anti-Heat shock 70 kDa protein 4 antibody

Catalog: PHY3421S

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	Hsp70s function as molecular chaperones and are encoded by a multi-gene family whose members play a crucial role in plant response to stress conditions, and in plant growth and development.
<b>Synonyms:</b>	HSP70-4, ARABIDOPSIS HEAT SHOCK PROTEIN 70, ATHSP70, HEAT SHOCK 70 KDA PROTEIN 4, HEAT SHOCK PROTEIN 70, HSC70-4, HSP70
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (15 aa from C terminal section) derived from <i>Arabidopsis thaliana</i> HSP70-4 (AT3G12580).
<b>Form:</b>	Lyophilized
<b>Quantity:</b>	150 µg
<b>Purification:</b>	Serum Peptide affinity form antibody available upon request at <a href="mailto:info@phytoab.com">info@phytoab.com</a> .
<b>Reconstitution:</b>	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".
<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

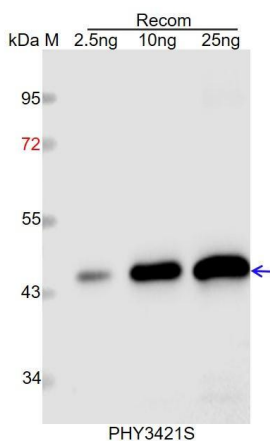
<b>Recommended Dilution:</b>	Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user.
<b>Expected / apparent MW:</b>	71 kDa
<b>Predicted Reactivity:</b>	Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in <i>Brassica napus</i> , <i>Brassica rapa</i> , <i>Panicum virgatum</i> , <i>Triticum aestivum</i> ,

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*Solanum lycopersicum*, *Hordeum vulgare*, *Nicotiana tabacum*, *Oryza sativa*, *Glycine max*, *Sorghum bicolor*, *Setaria viridis*, *Solanum tuberosum*, *Zea mays*, and 80-99% homologues with the sequence in *Vitis vinifera*, *Spinacia oleracea*, *Gossypium raimondii*, *Cucumis sativus*.

The sequence of the synthetic peptide used for immunization is 93% homologues with the sequence in HSP70-1 (AT5G02500), HSP70T-1 (AT1G56410), AT3G09440, and HSP70-2 (AT5G02490), and 80% homologues with the sequence in Hsp70b (AT1G16030). 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.