

# Agrisera

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Product no **AS09 481**

## BiP | Lumenal-binding protein (rabbit antibody)

### Product information

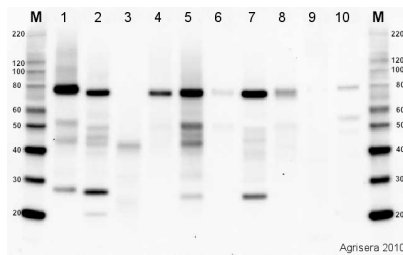
<b>Immunogen</b>	KLH-conjugated synthetic peptide derived from <i>Arabidopsis thaliana</i> BiP proteins: BiP1 <a href="#">At5g28540_Q9LKR3</a> , BiP2 <a href="#">At5g42020_F4K007</a> , BiP3 <a href="#">At1g09080_Q8H1B3</a>
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Affinity purified serum in PBS, pH 7.4
<b>Format</b>	Lyophilized
<b>Quantity</b>	50 µg
<b>Reconstitution</b>	For reconstitution add 50 µl of sterile water.
<b>Storage</b>	Store lyophilized/reconstituted at -20 °C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes.

### Application information

<b>Recommended dilution</b>	1 : 8000 (ELISA), 1 : 600 (IF), 1 : 2000 (WB)
<b>Expected   apparent MW</b>	73.5   80 kDa
<b>Confirmed reactivity</b>	<i>Anacardium occidentale</i> , <i>Arabidopsis thaliana</i> , <i>Brassica napus</i> , <i>Chara australis</i> R.Br, <i>Chlamydomonas reinhardtii</i> , <i>Cucumis sativus</i> , <i>Mangifera indica</i> , <i>Moniliophthora perniciosa</i> , <i>Nicotiana benthamiana</i> , <i>Nicotiana tabacum</i> , <i>Raphanus sativa</i> L. Tokinashi-daikon, <i>Olea europaea</i> , <i>Oryza sativa</i> , <i>Picea abies</i> , <i>Pistachio sp.</i> , <i>Physcomitrella patens</i> , <i>Schinus molle</i> , <i>Spinacia oleracea</i> , <i>Solanum lycopersicum</i> , <i>Solanum tuberosum</i> , <i>Triticum aestivum</i> , <i>Zea mays</i>
<b>Predicted reactivity</b>	<i>Arabis alpina</i> , <i>Capsella rubella</i> , <i>Capsicum annum</i> , <i>Citrus clementina</i> , <i>Citrus sinsensis</i> , <i>Eucalyptus grandis</i> , <i>Glycine max</i> , <i>Hordeum vulgare</i> , <i>Isatis tinctorina</i> , <i>Prunus persica</i> , <i>Triticum aestivum</i> , <i>Petunia hybrida</i> , <i>Picea sitcHensis</i> , <i>Populus trichocarpa</i> , <i>Ricinus communis</i> , <i>Vitis vinifera</i> Species of your interest not listed? <a href="#">Contact us</a>
<b>Not reactive in</b>	<i>Ostreococcus tauri</i>
<b>Additional information</b>	Protein or membrane sample should be treated at 70 °C for 10 min before loading on the gel. This antibody has so far not worked in IP.  For high resolution images, please visit the specific product page at <a href="http://www.agrisera.com">www.agrisera.com</a>
<b>Selected references</b>	<a href="#">Hurny et al. (2020)</a> . SYNERGISTIC ON AUXIN AND CYTOKININ 1 Positively Regulates Growth and Attenuates Soil Pathogen Resistance. Nat Commun. 2020 May 1;11(1):2170. doi: 10.1038/s41467-020-15895-5. (immunolocalization) <a href="#">Yang et al. (2020)</a> . PROTEIN PHOSPHATASE 95 Regulates Phosphate Homeostasis by Affecting Phosphate Transporter Trafficking in Rice. Plant Cell. 2020 Jan 9. pii: tpc.00685.2019. doi: 10.1105/tpc.19.00685. <a href="#">Jang et al. (2020)</a> . 1Molecules and CellsCrABCA2 Facilitates Triacylglycerol Accumulation in Chlamydomonas reinhardtii under Nitrogen Starvation. Mol Cells. 2020 Jan 31;43(1):48-57. doi: 10.14348/molcells.2019.0262. <a href="#">Mares et al. (2020)</a> . Hydrosoluble phylloplane components of Theobroma cacao modulate the metabolism of Moniliophthora perniciosa spores during germination.Fungal Biol. 2020 Jan;124(1):73-81. doi: 10.1016/j.funbio.2019.11.008. <a href="#">Dalmadi et al. (2019)</a> . AGO-unbound cytosolic pool of mature miRNAs in plant cells reveals a novel regulatory step at AGO1 loading. Nucleic Acids Res. 2019 Aug 8. pii: gkz690. doi: 10.1093/nar/gkz690. <a href="#">Feng et al. (2019)</a> . Analyses of transgenic fibroblast growth factor 21 mature rice seeds. J-STAGE, Online ISSN : 1347-3735. <a href="#">Bastiaan-Net et al. (2018)</a> . IgE Cross-Reactivity of Cashew Nut Allergens. Int Arch Allergy Immunol. 2018 Oct 26;1-14. doi: 10.1159/000493100.

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- [Lomin et al. \(2017\)](#). Studies of cytokinin receptor–phosphotransmitter interaction provide evidences for the initiation of cytokinin signalling in the endoplasmic reticulum. *Functional Plant Biology*, CSIRO Publications. (Nicotiana benthamiana, western blot)
- [Zhang et al. \(2017\)](#). Control of secondary cell wall patterning involves xylan deacetylation by a GDSL esterase. *Nat Plants*. 2017 Mar 3;3:17017. doi: 10.1038/nplants.2017.17. (Oryza sativa, immunolocalization, western blot)
- [Je et al. \(2016\)](#). Signaling from maize organ primordia via FASCIATED EAR3 regulates stem cell proliferation and yield traits. *Nat Genet*. 2016 Jul;48(7):785-91. doi: 10.1038/ng.3567. Epub 2016 May 16.

## Western blot



**5 µg of total protein** from *A.thaliana* (1), *H. vulgare* (2), *P. sativum* (3)\*, *Z. mays* (4), *C. sativus*(5), *S. tuberosum* (6), *S. oleracea* (7), *S. lycopersicum* (8) *P. patens* (9)\*, *C. reinhardtii* (10) extracted with Agrisera PEB extraction buffer ([AS08\\_300](#)) were separated on **4-12% SDS-PAGE** and blotted 1h to **PVDF**. Blots were blocked immediately following transfer in 5 % non-fat milk in TBS-T, for 1h at room temperature with agitation. Blots were incubated in the primary antibody at a dilution of 1: 10 000 for 1h at room temperature with agitation. The antibody solution was decanted and the blot was rinsed briefly twice, then washed once for 15 min and 3 times for 5 min in TBS-T at room temperature with agitation. Blots were incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, from Agrisera [AS09\\_602](#)) diluted to 1:50 000 for 1h at room temperature with agitation. The blots were washed as above and developed for 5 min with ECL detection reagent of extreme femtogram range, according to the manufacturers instructions. Exposure time was 5 seconds. \* Lack of the signal or its low signal intensity in those samples can be due to the sample biology. If you work with those species, please [inquire](#).

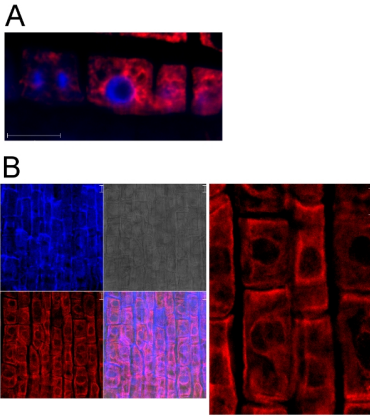
## Immunolocalization

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BiP localization in 5 days old *Arabidopsis thaliana* roots (**A**), 3 days old *Triticum aestivum* roots (**B**). BiP signal shown in red, DAPI in blue. The material has been fixed in para-formaldehyde for 30 minutes. Tissue cleaning has been performed before immunolocalization. Rabbit anti-BiP primary antibody diluted in 1: 600 and ALEXA 555 conjugated anti-rabbit secondary antibody (red color) have been used. Co-staining with DAPI visualized nucleus (blue color). Scale bar – 10  $\mu\text{m}$ .

Courtesy Dr. Taras Pasternak, Freiburg University, Germany