Agrisera
Part of Olink® Group

This product is **for research use only** (not for diagnostic or therapeutic use) **contact: support@agrisera.com**

Agrisera AB | Box 57 | SE-91121 Vännäs | Sweden | +46 (0)935 33 000 | www.agrisera.com

Product no AS20 4414

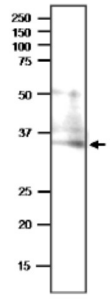
Anti-PBP1 | PYK10-binding protein 1 (N-terminal)

Product information

Immunogen	Conjugated peptide, derived from N-terminus of *Arabidopsis thaliana* PBP1, UniProt: O04314, TAIR: At3g16420
Host	Rabbit
Clonality	Polyclonal
Purity	Total IgG. Protein A purified in PBS, 50% glycerol. Filter sterilized.
Format	Liquid at 2 mg/ml.
Quantity	200 µg
Storage	Store at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please remember to spin the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.

Application information

Recommended dilution	1:1000 (IF), 1: 2000 (WB)
Expected | apparent MW	32 | 35 kDa
Confirmed reactivity	*Arabidopsis thaliana*
Predicted reactivity	*Brassica rapa, Raphanus sativus* Species of your interest not listed? Contact us
Not reactive in	No confirmed exceptions from predicted reactivity are currently known
Selected references	Nagano et al. (2005). Activation of an ER-body-localized beta-glucosidase via a cytosolic binding partner in damaged tissues of Arabidopsis thaliana. Plant Cell Physiol. 2005 Jul;46(7):1140-8. doi: 10.1093/pcp/pci126. (Immunofluorescence, Western blot, Arabidopsis thaliana) Matsushima et al. (2004). NAI1 gene encodes a basic-helix-loop-helix-type putative transcription factor that regulates the formation of an endoplasmic reticulum-derived structure, the ER body. Plant Cell. 2004 Jun;16(6):1536-49. doi: 10.1105/tpc.021154. (Western blot, Arabidopsis thaliana)



Arabidopsis thaliana crude leaf from 7 day-old seedlings was freshly extracted with 2x SDS-sample buffer (+ 2ME) for SDS-PAGE and denatured with 4X SDS buffer at 95°C for 5 min. 10 µg of protein was loaded and separated on 12.5 % SDS-PAGE and blotted to PVDF membrane at 15 V overnight. Blot was blocked with 3 % skim milk/TBS-T, 1h/RT with agitation. Blot was incubated in the primary antibody at a dilution of 1: 1000 in TBS-T for 1h/RT. The antibody solution was decanted and the blot was washed 4 times for 10 min in TBS-T at RT with agitation. Blot was incubated in matching secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated) diluted to 1:10 000 in for 1h/RT with agitation. The blot was washed as above and developed with a chemiluminescent detection reagent, following manufacture's recommendations.

Arabidopsis thaliana crude leaf from 7 day-old seedlings wilde-type with GFP-h fusion **(1)**, *nai1-1* mutant **(2)**, wild-type **(3)**, *nai1-2* mutant **(4)**, F1 progeny of GFPhx*nail1-2* **(5)**, F1 progeny of *nai1-1*x*nai1-2* **(6)** was freshly extracted with 2x SDS-sample buffer (+ 2ME) for SDS-PAGE and

denatured with 4X SDS buffer at 95°C for 5 min. Protein was loaded and separated on 12.5 % SDS-PAGE and blotted 1h to PVDF membrane. Blot was blocked with 3 % skim milk/TBS-T, 1h/RT with agitation. Blot was incubated in the primary antibody at a dilution of 1: 4000 in TBS-T for 1h/RT. The antibody solution was decanted and the blot was washed 4 times for 10 min in TBS-T at RT with agitation. Blot was incubated in matching secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated) diluted to 1:10 000 in for 1h/RT with agitation. The blot was washed as above and developed with a chemiluminescent detection reagent, following manufacture's recommendations.
PBP1 protein signal is abolished in sample 2,4,6 that indicates PBP1 expression is regulated by *NAI1* gene.