

Anti-At 2S3P (2S3 Albumin precursor) antibody, rabbit polyclonal

Cat. # 81-121 Size: 200 µg

Background:

2S seed storage protein 3, one of major seed storage proteins is synthesized on the endoplasmic reticulum as precursor and then transported to storage vacuoles, where it is processed by an asparaginyl endopeptidase to produce two mature polypeptides referred to as large and small subunits which are linked by disulfide bonds

Subcellular location: Vacuole

Specifications:

Storage: Shipped at 4°C and store at -20°C

Form: 2 mg/ml in PBS, 50% glycerol. Filter sterilized. No preservative or carrier added.

Purity: IgG, affinity-purified with Protein A/G mix

Immunogen: Synthetic peptide (SIYRTVVEFEEDDASNC) corresponding to the N-terminal propeptide of an *Arabidopsis* 2S albumin (2S3) and a Cys residue that was used as a linker for conjugation of the peptide to BSA.

Reactivity: Reacts with *A thaliana* 2S3 albumin precursor but does not react with the processed mature forms. Not tested in other species.

Applications

1. Western blot (1/2,500 dilution)
2. ELISA (assay dependent)
3. Immunoelectron microscopic analysis (1/500 dilution)

Other applications have not been tested.

Data Link: UniProtKB:[P15459](https://www.uniprot.org/entry/P15459) (2SS3_ARATH)

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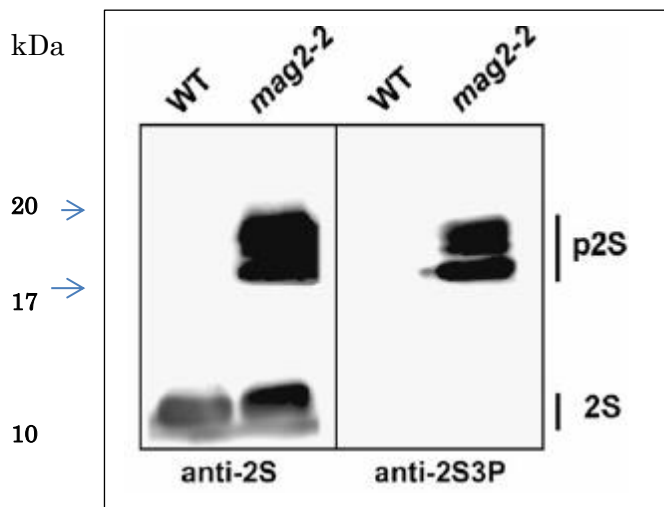


Fig. 1 Western Blot of the precursor 2S albumin in extract of arabidopsis dry seeds with anti-2S3P antibody.

Western blot showing that anti-2S3P antibody recognizes 2S albumin precursors (p2S) but not the mature forms (2S). Dry seeds of wildtype and mag2-2 (defective in processing the precursors) plants were subjected to immunoblotting with anti-2S antibody and anti-2S3P antibody (1/5,000 dilution)

References: This product has been used in the following publication.

1. Li L. et al. MAIGO2 is involved in exit of seed storage proteins from the endoplasmic reticulum in *Arabidopsis thaliana*. [Plant Cell](#). 2006 Dec;18(12):3535-47. PMID: [17194767](#). WB, Immuno-Electron Microscopy (*Arabidopsis*)
2. Takahashi H. et al. MAG4/Atp115 is a golgi-localized tethering factor that mediates efficient anterograde transport in *Arabidopsis*. [Plant Cell Physiol](#). 2010 Oct;51(10):1777-87. PMID: [20837504](#) Immuno-Electron Microscopy (*Arabidopsis*)
3. Shirakawa M. et al. *Arabidopsis* Qa-SNARE SYP2 proteins localized to different subcellular regions function redundantly in vacuolar protein sorting and plant development. *The Plant Journal* (2010) 64, 924–935. PMID: [21143674](#) WB, Immunoelectron Microscopy (*Arabidopsis*)
4. Li L. et al. MAG2 and three MAG2-INTERACTING PROTEINs form an ER-localized complex to facilitate storage protein transport in *Arabidopsis thaliana*. [Plant J](#). 2013 Dec;76(5):781-91. PMID: [24118572](#) WB (*Arabidopsis*)
5. Shirakawa M. et al. CONTINUOUS VASCULAR RING (COV1) is a trans-Golgi network-localized membrane protein required for Golgi morphology and vacuolar protein sorting. [Plant Cell Physiol](#). 2014 Apr;55(4):764-72. PMID: [24363287](#) WB (*Arabidopsis*)

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