

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

81-121 200 µg

Shipping and Storage: Shipped at 4°C or -20°C and store at -20°C. Do not freeze.

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.

Form: 2 mg/ml in PBS- with 50% glycerol. Sterilized by ultrafiltration. No preservative or carrier protein

Purity: IgG fraction purified by protein A/G affinity-chromatography from rabbit antiserum

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 blotting (1/2,500)
2. Immuno-electron microscopy (1/500)
3. ELISA (Assay dependent)

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

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

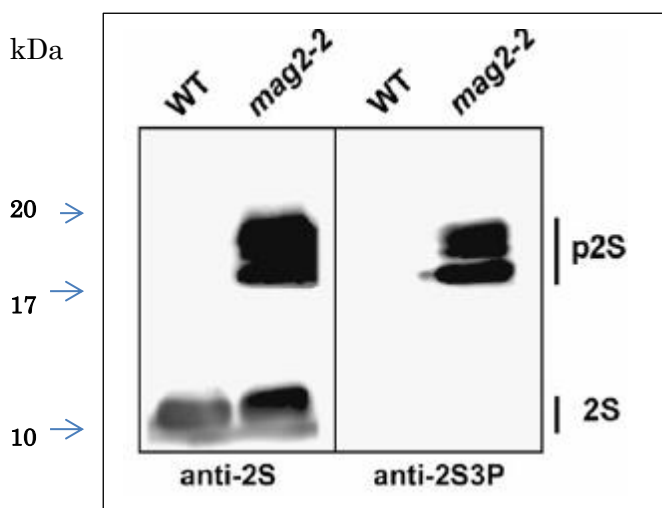


Fig.1 Western Blot of the precursor 2S albumin in extract of arabidopsis dry seeds with anti-2S3P antibody.

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

Reference: This product has been used in the following publications.

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, Immuno-electron Mycroscopy (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)**

Related products.

81-122 Anti-At 2S3M (2S albumin mature forms) antibody, rabbit polyclonal

81-123 Anti-At 12S (12S globulin) antibody, rabbit polyclonal