

Anti- At 2S3P (2S3 Albumin precursor) antibody, rabbit polyclonal 81-121 200 µg

Storage: Ship at 4°C and store at -20°C. Do not freeze.

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

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.

Applications:

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

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

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

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 (2SS3_ARATH)

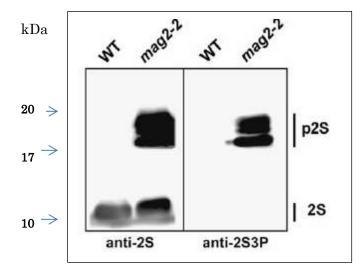


Fig.1 Western Blot of the precursor 2S albumin in extract of arabidopsis dry seeds with anti-2S3P antibody.

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 preursors) plants were subjected to immunoblotting with anti-2S antibody and anti-2S3P antibody (1/5,000 dilution)



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. <u>Plant Cell.</u> 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. <u>Plant Cell Physiol.</u> 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 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. <u>Plant J.</u> 2013 Dec;76(5):781-91. PMID:<u>24118572</u> **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.

 $81\mbox{-}122\,\mbox{Anti-At}$ $2\mbox{S3M}$ (2S albumin mature forms) antibody, rabbit polyclonal

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