

Anti-MEB1 (Membrane protein of ER Body1) antibody, Rabbit polyclonal

81-101 100 µg

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

Immunogen: Recombinant His-MEB1 (271-502 amino acids) protein of *A. thaliana*.

Form: 2 mg /ml in PBS- with 50% glycerol. Sterilized by ultrafiltration.

Purity: Affinity-purified with protein A from the antiserum-

Reactivity: Reacts with *Arabidopsis thaliana* MEB1 protein. No cross-reaction with MEB2 protein. Expected to reacts with related plant species from sequence conservation.

Validation: Validated by mutants (Fig.2)

Applications:

1. Western blot (1/1000-1/2000)
2. Immunoprecipitation (1/100-1/500)
3. ELISA (assay dependent)

Background: May sequester excess cytosolic iron and manganese into endoplasmic reticulum to reduce metal ion toxicity. Not essential for the accumulation of ER body components.

Subcellular localization: Membrane of endoplasmic reticulum.

Data Link: UniProtKB [Q8W4P8](https://www.uniprot.org/entry/Q8W4P8) (MEB1_ARATH)

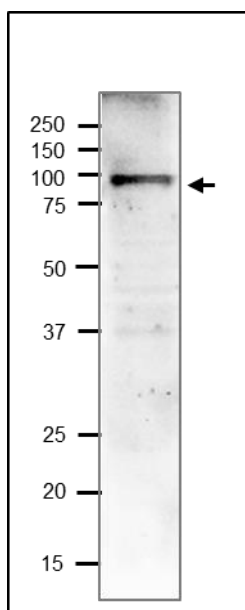


Fig 1. Western Blot of MEB1 in extract of 7 day seedling of *A. thaliana*.

12.5% gel

Blotting 15v, overnight (wet)

1st antibody, 2 µg/mL

2nd antibody Goat anti-rabbit IgG H&L (HRP) (ab97051),
10000 dilution

Loading sample: 7 day seedling (10µg)

Calculated molecular mass is 68 kDa. . This difference between predicted and observed molecular masses (~85 kDa) may be attributable to the large number of hydrophobic residues, which affect the behavior of proteins in SDS-PAGE analysis

1 2 3 4 5 6 7 8

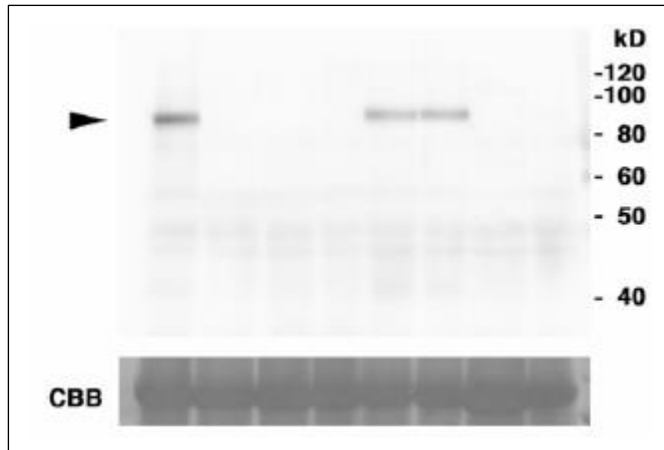


Fig 2. Western Blot of extracts of wild-type and *meb1* mutant cells

Samples: 7-day old seedlings from 1 (wild-type), 2 (*meb1-1*), 3 (*meb1-2*), 4 (*meb1-3*), 5 (*meb2-1*), 6 (*meb2-3*), 7 (*meb1-1 meb2-1*), 8 (*nal-1-1*). NAI1 protein is MEB1 interacting protein. Coomassie blue staining (CBB) shows the Rubisco large subunit, which served as a loading control. Proteins were separated by SDS-PAGE, transferred to a nylon membrane, and subjected to immunoblot analysis using anti-MEB1 (1:2,000 dilution)

Reference: This antibody has been described and used in the following publication.

Yamada K et al. Identification of two novel endoplasmic reticulum body-specific integral membrane proteins. [Plant Physiology](#) 2013 Jan;161(1):108-20. PMID [23166355](#)
WB, IP (*A. thaliana*)

Related products

81-102 anti-MEB2 antibody

81-103 anti-NAI2 (Signal Peptide deleted) antibody

81-104 anti-NAI2 (C-terminal) antibody