Anti-FAB1A Antibody

HA500403

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Arabidopsis thaliana
Applications:	IF-Tissue, IHC-P
Molecular Wt:	196 kDa

Description: The PI(3,5)P2 regulatory complex regulates both the synthesis and turnover of phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2). Catalyzes the phosphorylation of phosphatidylinositol 3-phosphate on the fifth hydroxyl of the myo-inositol ring, to form phosphatidylinositol 3,5-bisphosphate (By similarity). Plays an important role in maintenance of endomembrane homeostasis including endocytosis, vacuole formation, and vacuolar acidification processes. Required for development of viable pollen. Might mediate recycling of auxin transporters.

Immunogen: Synthetic peptide within Arabidopsis thaliana FAB1A aa 100-200 / 1757.

Positive control: A. thaliana tissue.

Subcellular location: Endosome membrane.

Database links: SwissProt: Q0WUR5 ARATH

Recommended Dilutions:

IF-Tissue	1:50-1:100
IHC-P	1:50-1:200

Storage Buffer: 1*TBS (pH7.4), 1% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Immunogen affinity purified.

Images

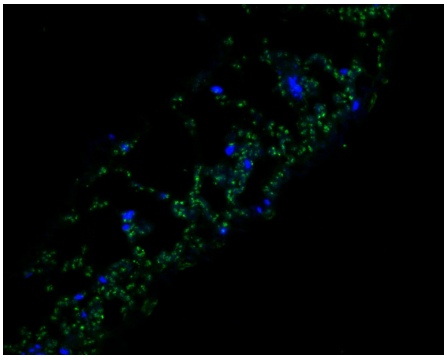

Fig1: Immunofluorescence staining of paraffin- embedded A. thaliana using anti-FAB1A rabbit polyclonal antibody.The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with HA500403 at 1/100 dilution for 10 hours at 4℃ and detected using Alexa Fluor® 488 conjugate-Goat anti-Rabbit IgG (H+L) Secondary Antibody at a dilution of 1:500 for 1 hour at room temperature.

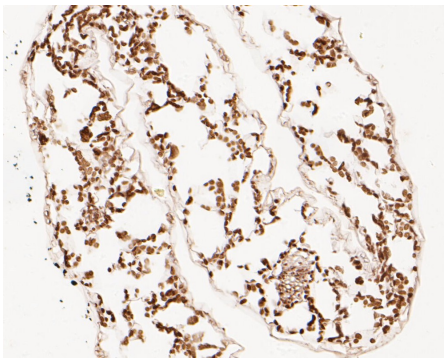

Fig2: Immunohistochemical analysis of paraffin-embedded A. thaliana tissue using anti-FAB1A antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA500403, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Hirano T. et. al. Loss-of-function and gain-of-function mutations in FAB1A/B impair endomembrane homeostasis, conferring pleiotropic developmental abnormalities in Arabidopsis. Plant Physiol. 155:797-807(2011).
2. Hirano T. et. al. Arabidopsis FAB1A/B is possibly involved in the recycling of auxin transporters. Plant Signal. Behav. 6:583-585(2011).