Anti-PAS2 Antibody

ER1902-29

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Arabidopsis thaliana
Applications:	IF-Tissue, IHC-P
Molecular Wt:	Predicted band size: 25 kDa

Description: Catalyzes the third of the four reactions of the long-chain fatty acids elongation cycle. This endoplasmic reticulum-bound enzymatic process, allows the addition of two carbons to the chain of long- and very long-chain fatty acids/VLCFAs per cycle. This enzyme catalyzes the dehydration of the 3-hydroxyacyl-CoA intermediate into trans-2,3-enoyl-CoA, within each cycle of fatty acid elongation. Thereby, it participates in the production of VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators. May be an anti-phosphatase that prevents CDKA-1 dephosphorylation and activation. Involved in the hormonal control of cell division and differentiation. Required for proliferation control of meristematic and non-meristematic cells. Negative regulator of the cell cycle.

Immunogen: Synthetic peptide within thaliana PAS2 aa 172-221 / 221.

Positive control: Arabidopsis thaliana.

Subcellular location: Nucleus, endoplasmic reticulum membrane, cytoplasm.

Database links: SwissProt: Q8VZB2 ArabidopsisThaliana

Recommended Dilutions:

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

Storage Buffer: 1*PBS (pH7.4), 0.2% 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

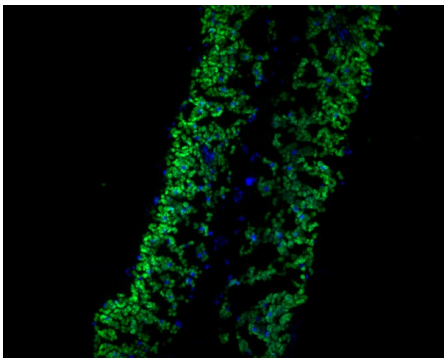

Fig1: Immunofluorescence staining of paraffin- embedded Arabidopsis thaliana using anti-PAS2 rabbit polyclonal antibody.The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes.(sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with ER1902-29 at 1/50 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.

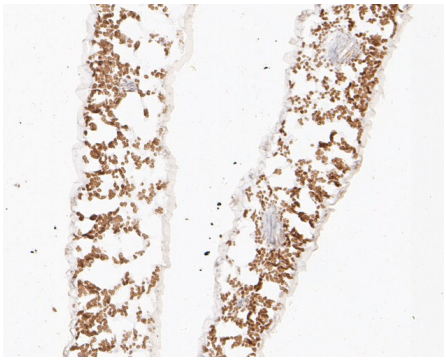

Fig2: Immunohistochemical analysis of paraffin-embedded Arabidopsis thaliana tissue using anti-PAS2 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ER1902-29, 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. Yanovsky MJ. et. al. Missense mutation in the PAS2 domain of phytochrome A impairs subnuclear localization and a subset of responses. Plant Cell. 2002 Jul;14(7):1591-603.