SANTA CRUZ BIOTECHNOLOGY, INC.

PIN1 (aK-13): sc-27161

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Polar auxin transport controls multiple developmental processes in plants, including the formation of vascular tissue. Mutations affecting the PIN-FORMED (PIN1) gene diminish polar auxin transport in Arabidopsis thaliana inflorescence axes. The PIN1 gene encodes a 67 kDa protein with similarity to bacterial and eukaryotic carrier proteins. The PIN1 protein is at the basal end of auxin transport-competent cells in vascular tissue and may act as a transmembrane component of the auxin efflux carrier.

REFERENCES

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7. Blakeslee, J.J., Bandyopadhyay, A., Peer, W.A., Makam, S.N., Murphy, A.S., 2004. Relocalization of the PIN1 auxin efflux facilitator plays a role in phototropic responses. Plant Physiol. 134: 28-31.

SOURCE

PIN1 (aK-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PIN1 of *Arabidopsis thaliana* origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-27161 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

PIN1 (aK-13) is recommended for detection of PIN1 of *Arabidopsis thaliana* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of PIN1: 67 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.