



CAX1 (aC-20): sc-27242

BACKGROUND

In plants and fungi, vacuolar transporters help remove potentially toxic cations from the cytosol. Transporter-mediated Ca^{2+} efflux from the cytoplasm is an important component of plant signal transduction. The *Arabidopsis thaliana* cation exchangers, CAX1, CAX2 and CAX3, can transport Ca^{2+} into the vacuole. Precise regulation of calcium transporters is essential for modulating the Ca^{2+} signaling network that is involved in the growth and adaptation of all organisms. The *Arabidopsis* $\text{H}^{+}/\text{Ca}^{2+}$ antiporter, CAX1, is a high capacity and low affinity Ca^{2+} transporter and several CAX1-like transporters are found in *Arabidopsis*.

REFERENCES

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7. Cheng, N.H., et al. 2003. Cloning and characterization of CXIP1, a novel PICOT domain-containing *Arabidopsis* protein that associates with CAX1. *J. Biol. Chem.* 278: 6503-6509.
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SOURCE

CAX1 (aC-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CAX1 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-27242 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CAX1 (aC-20) is recommended for detection of CAX1 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).

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.

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.

PROTOCOLS

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