SANTA CRUZ BIOTECHNOLOGY, INC.

Sac1 (yC-20): sc-15644

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The *Saccharomyces cerevisiae* SAC1 gene modulates yeast actin function and alleviates the essential requirement for phosphatidylinositol transfer protein (Sec14p) activity in Golgi secretory function. The SAC1 gene product (Sac1p) is an integral membrane lipid phosphatase of the endoplasmic reticulum (ER) and the Golgi complex and contains a Sac phosphatase domain. Sac1p functions in a wide range of cellular processes including inositol metabolism, actin cytoskeletal organization, endoplasmic reticulum ATP transport, phosphatidylinositol-phospha-tidylcholine transfer protein function and multiple-drug sensitivity. Sac1p is an important regulator of microsomal ATP transport, providing a link between inositol phospholipid signaling and ATP-dependent processes in the yeast ER. Defects in Sac1p relieves the requirement for Sec14p by altering phospholipid metabolism to expand the pool of diacylglycerol in the Golgi. Sac1p dysfunction exerts its pleiotropic effects on yeast Golgi function, the organization of the actin cytoskeleton, and the cellular requirement for inositol, through altered metabolism of inositol glycerophospholipids. These effects suggest the secretory and cytoskeletal activities are coordinated to achieve proper spatial regulation of secretion in *S. cerevisiae*.

REFERENCES

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STORAGE

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

SOURCE

Sac1 (yC-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Sac1 of Saccharomyces cerevisiae 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-15644 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Sac1 (yC-20) is recommended for detection of Sac1 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) 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.

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.