SANTA CRUZ BIOTECHNOLOGY, INC.

Yif1p (yT-16): sc-32672

BACKGROUND

The yeast protein Yif1p is a multiple transmembrane spanning protein that is localized to COPII vesicles and the Golgi membrane. At the Golgi membrane, Yif1p forms a complex with Yip1p. The Yip1p-Yif1p complex is involved in ER to Golgi transport, allowing for the fusion of ER vesicles to the Golgi apparatus. The Yip1p-Yif1p complex interacts with several proteins, including Yosp1p, Ypt1p, Ypt31p, Sec4p and Btn2p, as well as SNARE proteins involved in membrane fusion, Bos1p and Sec22p. Yif1p is characterized by a cytosolic N-terminus that interacts with GTPases, and a luminal C terminus. Mutations in either Yif1p or Yip1p *in vitro* block ER-Golgi transport, corroborating the putative functional role of this complex.

REFERENCES

1. Matern, H., et al. 2000. A novel Golgi membrane protein is part of a GTPase-binding protein complex involved in vesicle targeting. EMBO J. 19: 4485-4492.
2. Otte, S., et al. 2001. Erv41p and Erv46p: new components of COPII vesicles involved in transport between the ER and Golgi complex. J. Cell. Biol. 152: 503-518.
3. Barrowman, J., et al. 2003. The Yip1p.Yif1p complex is required for the fusion competence of endoplasmic reticulum-derived vesicles. J. Biol. Chem. 278: 19878-19884.
4. Chattopadhyay, S., et al. 2003. The yeast model for Batten disease: a role for Btn2p in the trafficking of the Golgi-associated vesicular targeting protein, Yif1p. Biochem. Biophys. Res. Commun. 302: 534-538.
5. Shakoori, A., et al. 2003. Identification of a five-pass transmembrane protein family localizing in the Golgi apparatus and the ER. Biochem. Biophys. Res. Commun. 312: 850-857.
6. Heidtman, M., et al. 2005. Yos1p is a novel subunit of the Yip1p-Yif1p complex and is required for transport between the endoplasmic reticulum and the Golgi complex. Mol. Biol. Cell. 16: 1673-1683.
7. Jin, C., et al. 2005. Human Yip1A specifies the localization of Yif1 to the Golgi apparatus. Biochem. Biophys. Res. Commun. 334: 16-22.
8. Kim, Y., et al. 2005. Interaction among Btn1p, Btn2p, and Ist2p reveals potential interplay among the vacuole, amino acid levels, and ion homeostasis in the yeast *Saccharomyces cerevisiae*. Eukaryot. Cell. 4: 281-288.

SOURCE

Yif1p (yT-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Yif1p 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-32672 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Yif1p (yT-16) is recommended for detection of Yif1p 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).

Molecular Weight of Yif1p: 35.5 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.

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.