SANTA CRUZ BIOTECHNOLOGY, INC.

Yip1p (yE-12): sc-32676

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The Power to Question

BACKGROUND

Yip1p is a yeast protein of the YIP1 family, a group of membrane proteins that can bind to Rab GTPases. Yip1p is a transmembrane spanning protein localized to the Golgi membrane, and forms a complex with Yif1p. The Yip1p-Yif1p complex is involved in endoplasmic reticulum (ER) to Golgi transport, allowing for the fusion of ER vesicles to the Golgi apparatus. The Yip1p-Yif1p complex also interacts with Yos1p, which may act as a subunit of the complex. Yip1p interacts with several proteins, including Yop1p, Yab8p, Ypt1p and Ypt31p. Yip1p may play a role in the creation of COPII transport vesicles, which are derived from the ER.

REFERENCES

1. Yang, X., et al. 1998. Specific binding to a novel and essential Golgi membrane protein (Yip1p) functionally links the transport GTPases Ypt1p and Ypt31p. EMBO J. 17: 4954-4963.
2. 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.
3. Hannus, S., et al. 2000. The *Schizosaccharomyces pombe* protein Yab8p and a novel factor, Yip1p, share structural and functional similarity with the spinal muscular atrophy-associated proteins SMN and SIP1. Hum. Mol. Genet. 9: 663-674.
4. Calero, M., et al. 2001. Yop1p, the yeast homolog of the polyposis locus protein 1, interacts with Yip1p and negatively regulates cell growth. J. Biol. Chem. 276: 12100-12112.
5. Calero, M., et al. 2002. Identification of the novel proteins Yip4p and Yip5p as Rab GTPase interacting factors. FEBS Lett. 515: 89-98.
6. Calero, M., et al. 2002. *Saccharomyces cerevisiae* Pra1p/Yip3p interacts with Yip1p and Rab proteins. Biochem. Biophys. Res. Commun. 290: 676-681.
7. 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.
8. Heidtman, M., et al. 2003. A role for Yip1p in COPII vesicle biogenesis. J. Cell. Biol. 163: 57-69.
9. Calero, M., et al. 2003. Dual prenylation is required for Rab protein localization and function. Mol. Biol. Cell. 14: 1852-1867.

SOURCE

Yip1p (yE-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Yip1p 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-32676 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Yip1p (yE-12) is recommended for detection of Yip1p 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)i.

Molecular Weight of Yip1p: 27 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.