SANTA CRUZ BIOTECHNOLOGY, INC.

Tlg2 (yC-20): sc-23725

BACKGROUND

Members of the syntaxin protein family participate in the docking-fusion step of several intracellular vesicular transport events. The t-SNARE in a late Golgi compartment (Tlg2) syntaxin is required for endocytosis and localization of cycling proteins to the late Golgi compartment in yeast. Tlg2 is unique among known syntaxin family proteins in possessing a sizeable hydrophilic domain of 63 amino acids that is C-terminal to the membrane spanning region and nonessential for Tlg2 function. Tlg2 assembles with two light chains, Tlg1 and Vti1, to form a functional t-SNARE that mediates fusion, specifically with the v-SNAREs Snc1 and Snc2. *In vitro*, Tlg2 is inert, locked in a nonfunctional state, unless it is activated for fusion. Fractionation and protease protection experiments indicate that Tlg2 is required in the constitutive cytoplasm to vacuole targeting pathway, but not in inducible macroautophagy.

REFERENCES

1. Nichols, B.J., et al. 1998. The Sec1p homologue Vps45p binds to the syntaxin Tlg2p. Eur. J. Cell Biol. 77: 263-268.
2. Abeliovich, H., et al. 1998. Tlg2p, a yeast syntaxin homolog that resides on the Golgi and endocytic structures. J. Biol. Chem. 273: 11719-11727.
3. Abeliovich, H., et al. 1999. Cytoplasm to vacuole trafficking of aminopeptidase I requires a t-SNARE-Sec1p complex composed of Tlg2p and Vps45p. EMBO J. 18: 6005-6016.
4. Coe, J.G., et al. 1999. A role for Tlg1p in the transport of proteins within the Golgi apparatus of *Saccharomyces cerevisiae*. Mol. Biol. Cell 10: 2407-2423.
5. Panek, H.R., et al. 2000. Identification of Rgp1p, a novel Golgi recycling factor, as a protein required for efficient localization of yeast casein kinase 1 to the plasma membrane. J. Cell Sci. 113: 4545-4555.
6. Paumet, F., et al. 2001. A t-SNARE of the endocytic pathway must be activated for fusion. J. Cell Biol. 155: 961-968.

SOURCE

Tlg2 (yC-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Tlg2 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-23725 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

Tlg2 (yC-20) is recommended for detection of Tlg2 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.

PROTOCOLS

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