# SANTA CRUZ BIOTECHNOLOGY, INC.

# Bet1 (L-19): sc-28084



BACKGROUND

Bet1 (Bet1p homologe, rbet1) is a Type IV membrane protein. It is required for vesicular transport from the ER to the Golgi complex. Bet1 forms a complex with SNARE (soluble N-ethylmaleimide-sensitive factor attachment protein receptor), and functions in membrane fusion between ER-derived vesicles and vesicular tubular clusters (VTCs) or by homotypically fusing ER-derived vesicles. Bet1 is predominantly associated with vesicular spotty structures that concentrate in the peri-Golgi region but are also present throughout the cytoplasm.

## REFERENCES

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- 2. Xu, D., Joglekar, A.P., Williams, A.L. and Hay, J.C. 2000. Subunit structure of a mammalian ER/Golgi SNARE complex. J. Biol. Chem. 275: 39631-39639.
- Joglekar, A.P., Xu, D., Rigotti, D.J., Fairman, R. and Hay, J.C. 2003. The SNARE motif contributes to rBet1 intracellular targeting and dynamics independently of SNARE interactions. J. Biol. Chem. 278: 14121-14133.
- Miller, E.A., Beilharz, T.H., Malkus, P.N., Lee, M.C., Hamamoto, S., Orci, L. and Schekman, R. 2003. Multiple cargo binding sites on the COPII subunit Sec24p ensure capture of diverse membrane proteins into transport vesicles. Cell 114: 497-509.
- Volchuk, A., Ravazzola, M., Perrelet, A., Eng, W.S., Di Liberto, M., Varlamov, O., Fukasawa, M., Engel, T., Sollner, T.H., Rothman, J.E. and Orci, L. 2004. Countercurrent distribution of two distinct SNARE complexes mediating transport within the Golgi stack. Mol. Biol. Cell 15: 1506-1518.
- SWISS-PROT/TrEMBL (015155). World Wide Web URL: http://www.expasy. ch/sprot/sprot-top.html

# CHROMOSOMAL LOCATION

Genetic locus: BET1 (human) mapping to 7q21.3; Bet1 (mouse) mapping to 6 A1.

# SOURCE

Bet1 (L-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Bet1 of human origin.

# PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-28084 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# APPLICATIONS

Bet1 (L-19) is recommended for detection of Bet1 of mouse, rat and human 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).

Bet1 (L-19) is also recommended for detection of Bet1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Bet1 siRNA (h): sc-45900, Bet1 siRNA (m): sc-45901, Bet1 shRNA Plasmid (h): sc-45900-SH, Bet1 shRNA Plasmid (m): sc-45901-SH, Bet1 shRNA (h) Lentiviral Particles: sc-45900-V and Bet1 shRNA (m) Lentiviral Particles: sc-45901-V.

Molecular Weight of Bet1: 18 kDa.

Positive Controls: PC-12 cell lysate: sc-2250 or NRK whole cell lysate: sc-364197.

# **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) Immunofluo-rescence: 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.

# **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.