SANTA CRUZ BIOTECHNOLOGY, INC.

BET3L (N-15): sc-245042



BACKGROUND

BET3L, also known as TRAPPC3-like protein (trafficking protein particle complex subunit 3-like protein), is a 181 amino acid protein that belongs to the TRAPP small subunits family and the BET3 subfamily. BET3L may play a role in vesicular transport from endoplasmic reticulum to Golgi. The BET3L protein localizes to both endoplasmic reticulum and Golgi apparatus, and exists as two alternatively spiced isoforms. The gene that encodes BET3L maps to chromosome 6q22.1. Making up nearly 6% of the human genome, chromosome 6 contains around 1,200 genes within 170 million base pairs of sequence. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. A bipolar disorder susceptibility locus is also linked to the q arm of chromosome 6.

REFERENCES

- 1. Strausberg, R.L., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Proc. Natl. Acad. Sci. USA 99: 16899-16903.
- 2. Mungall, A.J., et al. 2003. The DNA sequence and analysis of human chromosome 6. Nature 425: 805-811.
- 3. Ota, T., et al. 2004. Complete sequencing and characterization of 21,243 full-length human cDNAs. Nat. Genet. 36: 40-45.
- McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. Am. J. Hum. Genet. 77: 582-595.
- 5. Turnbull, A.P., et al. 2005. Structure of palmitoylated BET3: insights into TRAPP complex assembly and membrane localization. EMBO J. 24: 875-884.
- 6. Kümmel, D., et al. 2005. The structure of the TRAPP subunit TPC6 suggests a model for a TRAPP subcomplex. EMBO Rep. 6: 787-793.
- 7. Kümmel, D., et al. 2006. Structure of the Bet3-Tpc6B core of TRAPP: two Tpc6 paralogs form trimeric complexes with Bet3 and Mum2. J. Mol. Biol. 361: 22-32.
- Bläker, H., et al. 2008. Recurrent deletions at 6q in early age of onset non-HNPCC- and non-FAP-associated intestinal carcinomas. Evidence for a novel cancer susceptibility locus at 6q14-q22. Genes Chromosomes Cancer 47: 159-164.
- SWISS-PROT/TrEMBL (Q5T215). World Wide Web URL: http://www.uniprot.org/uniprot/Q5T215

CHROMOSOMAL LOCATION

Genetic locus: BET3L (human) mapping to 6q22.1; Bet3I (mouse) mapping to 10.

SOURCE

BET3L (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of BET3L of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-245042 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BET3L (N-15) is recommended for detection of BET3L 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); non cross-reactive with BET3.

BET3L (N-15) is also recommended for detection of BET3L in additional species, including canine and bovine.

Molecular Weight of BET3L: 21 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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **D0 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.