SANTA CRUZ BIOTECHNOLOGY, INC.

TBL3 (N-15): sc-160853

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Transducin β-like protein 3 (TBL3), also known as WD-repeat protein SAZD, is an 808 amino acid protein and is a member of the WD40 repeat-containing protein family. Localized to the nucleus, TBL3 contains 13 WD repeats, a motif known to mediate protein-protein interactions. The large group of WD40 repeat family of proteins are suggested to be involved in signal transduction, RNA processing, gene regulation, vesicular trafficking, cytoskeletal assembly and may play a role in the control of cytotypic differentiation. The gene encoding TBL3 contains multiple polyadenylation sites and is located on human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

1. Weinstat-Saslow, D.L., Germino, G.G., Somlo, S. and Reeders, S.T. 1993. A transducin-like gene maps to the autosomal dominant polycystic kidney disease gene region. Genomics 18: 709-711.
2. Ben Hamida, C., Cavalier, L., Belal, S., Sanhaji, H., Nadal, N., Barhoumi, C., M'Rissa, N., Marzouki, N., Mandel, J.L., Ben Hamida, M., Koenig, M. and Hentati, F. 1997. Homozygosity mapping of giant axonal neuropathy gene to chromosome 16q24.1. Neurogenetics 1: 129-133.
3. Perez Jurado, L.A., Wang, Y.K., Francke, U. and Cruces, J. 1999. TBL2, a novel transducin family member in the WBS deletion: characterization of the complete sequence, genomic structure, transcriptional variants and the mouse ortholog. Cytogenet. Cell Genet. 86: 277-284.

CHROMOSOMAL LOCATION

Genetic locus: TBL3 (human) mapping to 16p13.3; Tbl3 (mouse) mapping to 17 A3.3.

SOURCE

TBL3 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TBL3 of human 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-160853 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-160853 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

TBL3 (N-15) is recommended for detection of TBL3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 TBL1 or TBL2.

TBL3 (N-15) is also recommended for detection of TBL3 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for TBL3 siRNA (h): sc-93384, TBL3 siRNA (m): sc-154121, TBL3 shRNA Plasmid (h): sc-93384-SH, TBL3 shRNA Plasmid (m): sc-154121-SH, TBL3 shRNA (h) Lentiviral Particles: sc-93384-V and TBL3 shRNA (m) Lentiviral Particles: sc-154121-V.

TBL3 (N-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

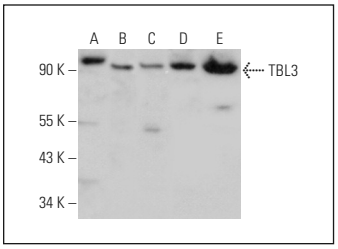
Molecular Weight of TBL3: 89 kDa.

Positive Control: HL-60 whole cell lysate: sc-2209, MCF7 nuclear extract: sc-2149 or K-562 nuclear extract: sc-2130.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



TBL3 (N-15): sc-160853. Western blot analysis of TBL3 expression in HL-60 (**A**) and THP-1 (**B**) whole cell lysates, human tonsil tissue extract (**C**) and MCF7 (**D**) and K-562 (**E**) nuclear extracts.

RESEARCH USE

For research use only, not for use in diagnostic procedures.