

TBCEL (N-16): sc-162286

BACKGROUND

TBCEL (tubulin-folding cofactor E-like protein), also known as LRRC35 (leucine-rich repeat-containing protein 35) or (EL) E-like protein, is a 424 amino acid cytoplasmic protein that acts as a regulator of tubulin stability. While abundantly expressed in testis, TBCEL is also present in several tissues at a much lower level. TBCEL contains seven LRR (leucine-rich) repeats, one LRRCT domain and one ubiquitin-like domain. The gene that encodes TBCEL consists of 66,704 bases and maps to human chromosome 11q23.3. Chromosome 11 houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that map to chromosome 11.

REFERENCES

1. Fabiani, J.E., et al. 2000. Hereditary angioedema. Long-term follow-up of 88 patients. Experience of the Argentine allergy and immunology institute. *Allergol. Immunopathol.* 28: 267-271.
2. Jira, P.E., et al. 2003. Smith-Lemli-Opitz syndrome and the DHCR7 gene. *Ann. Hum. Genet.* 67: 269-280.
3. Bartolini, F., et al. 2005. Identification of a novel tubulin-destabilizing protein related to the chaperone cofactor E. *J. Cell Sci.* 118: 1197-1207.
4. Online Mendelian Inheritance in Man, OMIM[™]. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610451. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Schuchman, E.H. 2007. The pathogenesis and treatment of acid sphingomyelinase-deficient Niemann-Pick disease. *J. Inher. Metab. Dis.* 30: 654-663.
6. Siem, G., et al. 2008. Jervell and Lange-Nielsen syndrome in Norwegian children: aspects around cochlear implantation, hearing, and balance. *Ear Hear.* 29: 261-269.
7. Bhuiyan, Z.A., et al. 2008. An intronic mutation leading to incomplete skipping of exon-2 in KCNQ1 rescues hearing in Jervell and Lange-Nielsen syndrome. *Prog. Biophys. Mol. Biol.* 98: 319-327.
8. Coldren, C.D., et al. 2009. Chromosomal microarray mapping suggests a role for BSX and Neurogranin in neurocognitive and behavioral defects in the 11q terminal deletion disorder (Jacobsen syndrome). *Neurogenetics* 10: 89-95.

CHROMOSOMAL LOCATION

Genetic locus: TBCEL (human) mapping to 11q23.3; Tbccl (mouse) mapping to 9 A5.1.

SOURCE

TBCEL (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TBCEL of human origin.

STORAGE

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

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-162286 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TBCEL (N-16) is recommended for detection of TBCEL 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 TBCE.

TBCEL (N-16) is also recommended for detection of TBCEL in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for TBCEL siRNA (h): sc-97073, TBCEL siRNA (m): sc-154118, TBCEL shRNA Plasmid (h): sc-97073-SH, TBCEL shRNA Plasmid (m): sc-154118-SH, TBCEL shRNA (h) Lentiviral Particles: sc-97073-V and TBCEL shRNA (m) Lentiviral Particles: sc-154118-V.

Molecular Weight of TBCEL: 48 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.

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.