



Tect3 (m2): 293T Lysate: sc-123974

BACKGROUND

Tect3 (tectonic-3), also known as TCTN3, is a 607 amino acid single-pass type I membrane protein that belongs to the tectonic family and exists as 4 alternatively spliced isoforms. Tect3 interacts with MKS1 and may be involved in apoptosis regulation. The gene that encodes Tect3 contains approximately 31,560 bases and maps to human chromosome 10q24.1. Spanning nearly 135 million base pairs and encoding nearly 1,200 genes, chromosome 10 makes up approximately 4.5% of the human genome. Several protein-coding genes, including those that encode chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie-Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, Cockayne syndrome, multiple endocrine neoplasia type 2 and porphyria. Tetrahydrobiopterin deficiency and a number of syndromes involving defective skull and facial bone fusion are also linked to chromosome 10.

REFERENCES

1. Jabs, E.W., et al. 1994. Jackson-Weiss and Crouzon syndromes are allelic with mutations in fibroblast growth factor receptor 2. *Nat. Genet.* 8: 275-279.
2. Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. *Neurogenetics* 4: 1-15.
3. Reiter, J.F. and Skarnes, W.C. 2006. Tectonic, a novel regulator of the Hed-gehog pathway required for both activation and inhibition. *Genes Dev.* 20: 22-27.
4. Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. *Am. J. Hum. Genet.* 81: 756-767.
5. Park, K.M., et al. 2007. Identification of novel regulators of apoptosis using a high-throughput cell-based screen. *Mol. Cells* 23: 170-174.
6. Cho, M.Y., et al. 2008. First report of ovarian dysgerminoma in Cowden syndrome with germline PTEN mutation and PTEN-related 10q loss of tumor heterozygosity. *Am. J. Surg. Pathol.* 32: 1258-1264.
7. Yin, Y. and Shen, W.H. 2008. PTEN: a new guardian of the genome. *Oncogene* 27: 5443-5453.
8. Laugel, V., et al. 2010. Mutation update for the CSB/ERCC6 and CSA/ERCC8 genes involved in Cockayne syndrome. *Hum. Mutat.* 31: 113-126.
9. Online Mendelian Inheritance in Man, OMIM™. 2011. Johns Hopkins University, Baltimore, MD. MIM Number: 613847. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: Tctn3 (mouse) mapping to 19 C3.

PRODUCT

Tect3 (m2): 293T Lysate represents a lysate of mouse Tect3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Tect3 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Tect3 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.