



tropomodulin 2 (h): 293T Lysate: sc-117113

BACKGROUND

Originally isolated from human erythrocytes, the tropomodulin (TMOD) family of proteins cap the pointed end of Actin filaments. A component of the membrane skeleton, TMOD binds to the amino-terminus of Tropomyosin, which coats the surface of Actin, and thus blocks the elongation and depolymerization of Actin filaments. Four TMOD isoforms, TMOD 1-TMOD 4, have been characterized in humans. TMOD expression is isoform-specific; TMOD 3 is expressed ubiquitously, whereas TMOD 2 and TMOD 4 are expressed in neuronal tissue and muscle, respectively. The human TMOD 2 gene maps to chromosome 15q21.2, which is within the same region as the gene for amyotrophic lateral sclerosis 5 (ALS5), and encodes a 351 amino acid protein. NTMOD, the rat homolog to TMOD2, is expressed predominantly in rat brain. NTMOD binds to the neuron-specific isoform TMbr2 and is the major binding protein to brain Tropomyosin in rat.

REFERENCES

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3. Kimura, S., Ichikawa, A., Ishizuka, J., Ohkouchi, S., Kake, T. and Maruyama, K. 1999. Tropomodulin isolated from rabbit skeletal muscle inhibits filament formation of Actin in the presence of Tropomyosin and troponin. *Eur. J. Biochem.* 263: 396-401.
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CHROMOSOMAL LOCATION

Genetic locus: TMOD2 (human) mapping to 15q21.2.

PRODUCT

tropomodulin 2 (h): 293T Lysate represents a lysate of human tropomodulin 2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

tropomodulin 2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive tropomodulin 2 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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.