

THUMPD1 (m): 293T Lysate: sc-127655

BACKGROUND

The THUMP (after thiouridine synthases, RNA methylases and pseudouridine synthases) domain is an ancient 100-110 amino acid motif that is found in proteins that are involved in RNA-modification pathways. THUMP domains contain RNA-binding sequences and are thought to deliver RNA modification enzymes to their target substrates. THUMPD1, THUMPD2 and THUMPD3 (THUMP domain-containing protein 1, 2 and 3, respectively) are members of the methyltransferase superfamily and each contain one THUMP domain. Both THUMPD2 and THUMPD3 are expressed in tissues throughout the body with highest expression levels in skeletal muscle, spleen, thymus, liver and kidney. Due to the presence of a THUMP domain, the THUMPD proteins are thought to participate in RNA processing events throughout the cell.

REFERENCES

1. Zhang, Y., Gorry, M.C., Hart, P.S., Pettenati, M.J., Wang, L., Marks, J.J., Lu, X. and Hart, T.C. 2001. Localization, genomic organization, and alternative transcription of a novel human SAM-dependent methyltransferase gene on chromosome 2p22→p21. *Cytogenet. Cell Genet.* 95: 146-152.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611751. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Lehner, B. and Sanderson, C.M. 2004. A protein interaction framework for human mRNA degradation. *Genome Res.* 14: 1315-1323.
4. Olsen, J.V., Blagoev, B., Gnäd, F., Macek, B., Kumar, C., Mortensen, P. and Mann, M. 2006. Global, *in vivo*, and site-specific phosphorylation dynamics in signaling networks. *Cell* 127: 635-648.
5. Gross, J.B., Hanken, J., Oglesby, E. and Marsh-Armstrong, N. 2006. Use of a ROSA26:GFP transgenic line for long-term *Xenopus* fate-mapping studies. *J. Anat.* 209: 401-413.

CHROMOSOMAL LOCATION

Genetic locus: Thumpd1 (mouse) mapping to 7 F2.

PRODUCT

THUMPD1 (m): 293T Lysate represents a lysate of mouse THUMPD1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

THUMPD1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive THUMPD1 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.