



Leiomodin 1 (m2): 293T Lysate: sc-178878

BACKGROUND

Members of the Leiomodin protein family are closely related to the tropomodulin family of actin filament pointed end-capping proteins. Leiomodins are characterized as actin-binding proteins that acts as strong filament nucleators in muscle cells. Leiomodin 1 is highly expressed in a variety of tissues that contain smooth muscle, therefore it is also known as smooth muscle Leiomodin, or SM-Lmod. Also designated C-Lmod, Leiomodin 2 is highly expressed in cardiomyocytes and is encoded by a gene that is located near the hypertrophic cardiomyopathy locus CMH6 on chromosome 7, therefore potentially targeting this protein as playing a role in that disease process. Leiomodin 3, also designated F-Lmod, is a 560 amino acid protein that is found in several types of fetal tissue and is involved in tropomyosin binding. There are two isoforms of Leiomodin-3 which result from alternative splicing events.

REFERENCES

1. Conley, C.A. and Fowler, V.M. 1999. Localization of the human 64kD autoantigen D1 to myofibrils in a subset of extraocular muscle fibers. *Curr. Eye Res.* 19: 313-322.
2. Conley, C.A. 2001. Leiomodin and tropomodulin in smooth muscle. *Am. J. Physiol., Cell Physiol.* 280: C1645-C1656.
3. Conley, C.A., et al. 2001. Leiomodins: larger members of the tropomodulin (Tmod) gene family. *Genomics* 73: 127-139.
4. Kostyukova, A.S. 2007. Leiomodin/tropomyosin interactions are isoform specific. *Arch. Biochem. Biophys.* 465: 227-230.
5. Fajarewicz, K., et al. 2007. A multi-gene approach to differentiate papillary thyroid carcinoma from benign lesions: gene selection using support vector machines with bootstrapping. *Endocr. Relat. Cancer* 14: 809-826.
6. De Minicis, S., et al. 2007. Gene expression profiles during hepatic stellate cell activation in culture and *in vivo*. *Gastroenterology* 132: 1937-1946.
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CHROMOSOMAL LOCATION

Genetic locus: Lmod3 (mouse) mapping to 6 D3.

PRODUCT

Leiomodin 1 (m2): 293T Lysate represents a lysate of mouse Leiomodin 1 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

Leiomodin 1 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Leiomodin 1 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.