



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Leiomodin 3 siRNA (m): sc-146699

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 64 kD 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., Fritz-Six, K.L., Almenar-Queralt, A. and Fowler, V.M. 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., Jarzab, M., Eszlinger, M., Krohn, K., Paschke, R., Oczko-Wojciechowska, M., Wiench, M., Kukulska, A., Jarzab, B. and Swierniak, A. 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., Seki, E., Uchinami, H., Kluwe, J., Zhang, Y., Brenner, D.A. and Schwabe, R.F. 2007. Gene expression profiles during hepatic stellate cell activation in culture and *in vivo*. *Gastroenterology* 132: 1937-1946.
7. Chereau, D., Boczkowska, M., Skwarek-Maruszewska, A., Fujiwara, I., Hayes, D.B., Rebowski, G., Lappalainen, P., Pollard, T.D. and Dominguez, R. 2008. Leiomodin is an actin filament nucleator in muscle cells. *Science* 320: 239-243.

CHROMOSOMAL LOCATION

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

PRODUCT

Leiomodin 3 siRNA (m) is a target-specific 19-25 nt siRNA designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Leiomodin 3 shRNA Plasmid (m): sc-146699-SH and Leiomodin 3 shRNA (m) Lentiviral Particles: sc-146699-V as alternate gene silencing products.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNases and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

Leiomodin 3 siRNA (m) is recommended for the inhibition of Leiomodin 3 expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 μ M in 66 μ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Leiomodin 3 gene expression knockdown using RT-PCR Primer: Leiomodin 3 (m)-PR: sc-146699-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

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.