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

SANTA CRUZ BIOTECHNOLOGY, INC.

TRIM72 siRNA (m): sc-154670

BACKGROUND

The tripartite motif (TRIM) family of proteins are characterized by a conserved TRIM domain that includes a coiled-coil region, a B-box type zinc finger, one RING finger and three zinc-binding domains. TRIM72 (tripartite motif containing 72), also known as MG53, is a 477 amino acid cytoplasmic vesicle membrane protein that belongs to the TRIM/RBCC family. Existing as a homo-oligomer, TRIM72 contains one B box-type zinc finger, one B30.2/SPRY domain and a RING-type zinc finger. TRIM72 is considered a muscle-specific protein that plays a central role in cell membrane repair by nucleating the assembly of the repair machinery at injury sites. TRIM72 is required for transport of dysferlin to sites of cell injury during repair patch formation. TRIM72 also regulates membrane budding and exocytosis and may be involved in the regulation of the mobility of KV2.1-containing endocytic vesicles. TRIM72 exists as two alternatively spliced isoforms and is encoded by a gene located on human chromosome 16p11.2.

REFERENCES

1. Weisleder, N., Takeshima, H. and Ma, J. 2009. Mitsugumin 53 (MG53) facilitates vesicle trafficking in striated muscle to contribute to cell membrane repair. Commun. Integr. Biol. 2: 225-226.
2. Cai, C., Weisleder, N., Ko, J.K., Komazaki, S., Sunada, Y., Nishi, M., Takeshima, H. and Ma, J. 2009. Membrane repair defects in muscular dystrophy are linked to altered interaction between MG53, caveolin-3, and dysferlin. J. Biol. Chem. 284: 15894-15902.
3. Cai, C., Masumiya, H., Weisleder, N., Pan, Z., Nishi, M., Komazaki, S., Takeshima, H. and Ma, J. 2009. MG53 regulates membrane budding and exocytosis in muscle cells. J. Biol. Chem. 284: 3314-3322.
4. Cai, C., Masumiya, H., Weisleder, N., Matsuda, N., Nishi, M., Hwang, M., Ko, J.K., Lin, P., Thornton, A., Zhao, X., Pan, Z., Komazaki, S., Brotto, M., Takeshima, H. and Ma, J. 2009. MG53 nucleates assembly of cell membrane repair machinery. Nat. Cell Biol. 11: 56-64.
5. Jung, S.Y. and Ko, Y.G. 2010. TRIM72, a novel negative feedback regulator of myogenesis, is transcriptionally activated by the synergism of MyoD (or myogenin) and MEF2. Biochem. Biophys. Res. Commun. 396: 238-245.
6. Lee, C.S., Yi, J.S., Jung, S.Y., Kim, B.W., Lee, N.R., Choo, H.J., Jang, S.Y., Han, J., Chi, S.G., Park, M., Lee, J.H. and Ko, Y.G. 2010. TRIM72 negatively regulates myogenesis via targeting Insulin receptor substrate-1. Cell Death Differ. 17: 1254-1265.
7. Park, E.Y., Kwon, O.B., Jeong, B.C., Yi, J.S., Lee, C.S., Ko, Y.G. and Song, H.K. 2010. Crystal structure of PRY-SPRY domain of human TRIM72. Proteins 78: 790-795.

CHROMOSOMAL LOCATION

Genetic locus: Trim72 (mouse) mapping to 7 F3.

PROTOCOLS

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

PRODUCT

TRIM72 siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TRIM72 shRNA Plasmid (m): sc-154670-SH and TRIM72 shRNA (m) Lentiviral Particles: sc-154670-V as alternate gene silencing products.

For independent verification of TRIM72 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-154670A, sc-154670B and sc-154670C.

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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

TRIM72 siRNA (m) is recommended for the inhibition of TRIM72 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 µM in 66 µl. 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.

SELECT PRODUCT CITATIONS

1. Ameneiro, C., Moreira, T., Fuentes-Iglesias, A., Coego, A., Garcia-Outeiral, V., Escudero, A., Torrecilla, D., Mulero-Navarro, S., Carvajal-Gonzalez, J.M., Guallar, D and Fidalgo, M. 2020. BMAL1 coordinates energy metabolism and differentiation of pluripotent stem cells. Life Sci. Alliance 3 pii: e201900534.

RESEARCH USE

For research use only, not for use in diagnostic procedures.