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.

Myosin Vc siRNA (m): sc-149762

BACKGROUND

Class V unconventional myosins, which include Myosin Va, Myosin Vb and Myosin Vc are nonfilamentous, Actin-binding enzymes that appear to be expressed ubiquitously. Myosin V proteins are regulated by their heavy chain phosphorylation, which occurs at the C-terminal tail domain. Myosin Vc, also known as MYO5C, is a 1,742 amino acid protein that is chiefly expressed in non-neuronal tissues. Abundantly expressed in epithelial and glandular tissues including pancreas, prostate, mammary, stomach, colon and lung, Myosin Vc may be involved in transferrin trafficking and is likely to power Actin-based membrane trafficking in many physiologically crucial tissues. Myosin Vc is also thought to participate in apical exocytosis of secretory vesicles. Containing one dilute domain, six IQ domains and a myosin head-like domain, Myosin Vc associates with Rab 8.

REFERENCES

1. Rodriguez, O.C. and Cheney, R.E. 2002. Human myosin Vc is a novel class V myosin expressed in epithelial cells. J. Cell Sci. 115: 991-1004.
2. Watanabe, S., Mabuchi, K., Ikebe, R. and Ikebe, M. 2006. Mechanoenzymatic characterization of human myosin Vb. Biochemistry 45: 2729-2738.
3. Marchelletta, R.R., Jacobs, D.T., Schechter, J.E., Cheney, R.E. and Hamm-Alvarez, S.F. 2008. The class V myosin motor, myosin 5c, localizes to mature secretory vesicles and facilitates exocytosis in lacrimal acini. Am. J. Physiol., Cell Physiol. 295: C13-C28.
4. Takagi, Y., Yang, Y., Fujiwara, I., Jacobs, D., Cheney, R.E., Sellers, J.R. and Kovács, M. 2008. Human myosin Vc is a low duty ratio, nonprocessive molecular motor. J. Biol. Chem. 283: 8527-8537.
5. Watanabe, S., Watanabe, T.M., Sato, O., Awata, J., Homma, K., Umeki, N., Higuchi, H., Ikebe, R. and Ikebe, M. 2008. Human myosin Vc is a low duty ratio nonprocessive motor. J. Biol. Chem. 283: 10581-10592.
6. Müller, T., Hess, M.W., Schiefermeier, N., Pfaller, K., Ebner, H.L., Heinz-Erian, P., Ponstingl, H., Partsch, J., Röllinghoff, B., Köhler, H., Berger, T., Lenhartz, H., Schlenck, B., Houwen, R.J., Taylor, C.J., Zoller, H., et al. 2008. MYO5B mutations cause microvillus inclusion disease and disrupt epithelial cell polarity. Nat. Genet. 40: 1163-1165.
7. Xu, X.F., Chen, Z.T., Gao, N., Zhang, J.L. and An, J. 2009. Myosin Vc, a member of the actin motor family associated with Rab 8, is involved in the release of DV2 from Hep G2 cells. Intervirology 52: 258-265.
8. Roland, J.T., Lapierre, L.A. and Goldenring, J.R. 2009. Alternative splicing in class V myosins determines association with Rab 10. J. Biol. Chem. 284: 1213-1223.
9. Jacobs, D.T., Weigert, R., Grode, K.D., Donaldson, J.G. and Cheney, R.E. 2009. Myosin Vc is a molecular motor that functions in secretory granule trafficking. Mol. Biol. Cell 20: 4471-4488.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Myo5c (mouse) mapping to 9 D.

PRODUCT

Myosin Vc 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 Myosin Vc shRNA Plasmid (m): sc-149762-SH and Myosin Vc shRNA (m) Lentiviral Particles: sc-149762-V as alternate gene silencing products.

For independent verification of Myosin Vc (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-149762A, sc-149762B and sc-149762C.

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

Myosin Vc siRNA (m) is recommended for the inhibition of Myosin Vc 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Myosin Vc gene expression knockdown using RT-PCR Primer: Myosin Vc (m)-PR: sc-149762-PR (20 µl). 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.