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.

OLFM3 siRNA (m): sc-150194

BACKGROUND

OLFM3 (olfactomedin 3), also known as NOE3, is a 478 amino acid protein that interacts with myocilin. Myocilin is an extracellular protein that plays a key role in the actomyosin system and is responsible for controlling intraocular pressure. OLFM3 is a secreted protein that contains an olfactomedin-like (OLF) domain, an approximately 260 amino acid motif commonly found in secreted glycoproteins. OLFM3 localizes to the Golgi apparatus of the cell and is highly expressed in both eye and brain tissue. Mutations in the gene that encodes OLFM3 may cause severe glaucoma, a condition in which increased intraocular pressure within the eyeball causes loss of eye sight.

REFERENCES

1. Karavanich, C.A. and Anholt, R.R. 1998. Molecular evolution of olfactomedin. Mol. Biol. Evol. 15: 718-726.
2. Nguyen, T.D., et al. 1998. Gene structure and properties of TIGR, an olfactomedin-related glycoprotein cloned from glucocorticoid-induced trabecular meshwork cells. J. Biol. Chem. 273: 6341-6350.
3. Kulkarni, N.H., et al. 2000. Characterization and differential expression of a human gene family of olfactomedin-related proteins. Genet. Res. 76: 41-50.
4. Kondo, D., et al. 2000. Localization of olfactomedin-related glycoprotein isoform (BMZ) in the golgi apparatus of glomerular podocytes in rat kidneys. J. Am. Soc. Nephrol. 11: 803-813.
5. Jacobson, N., et al. 2001. Non-secretion of mutant proteins of the glaucoma gene myocilin in cultured trabecular meshwork cells and in aqueous humor. Hum. Mol. Genet. 10: 117-125.
6. Torrado, M., et al. 2002. Optimedin: a novel olfactomedin-related protein that interacts with myocilin. Hum. Mol. Genet. 11: 1291-1301.
7. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607567. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
8. Nagy, I., et al. 2003. Expression and characterization of the olfactomedin domain of human myocilin. Biochem. Biophys. Res. Commun. 302: 554-561.

CHROMOSOMAL LOCATION

Genetic locus: Olfm3 (mouse) mapping to 3 F3.

PRODUCT

OLFM3 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 OLFM3 shRNA Plasmid (m): sc-150194-SH and OLFM3 shRNA (m) Lentiviral Particles: sc-150194-V as alternate gene silencing products.

For independent verification of OLFM3 (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-150194A, sc-150194B and sc-150194C.

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

OLFM3 siRNA (m) is recommended for the inhibition of OLFM3 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.

GENE EXPRESSION MONITORING

OLFM3 (M-N16): sc-100795 is recommended as a control antibody for monitoring of OLFM3 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor OLFM3 gene expression knockdown using RT-PCR Primer: OLFM3 (m)-PR: sc-150194-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.

PROTOCOLS

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