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.

NXNL2 siRNA (m): sc-150133

BACKGROUND

NXNL2 (Nucleoredoxin-like protein 2) is a 156 amino acid protein belonging to the Nucleoredoxin family. Other members of the Nucleoredoxin family include Nucleoredoxin (NXN) and NXNL1 (Nucleoredoxin-like protein 1). NXNL2 contains a conserved 139 amino acid thioredoxin (Trx) domain. Thioredoxin serves as a general protein disulphide oxidoreductase. NXNL1 and NXNL2 have been shown to encode rod-derived cone viability factors, RdCVF and RdCVF2, respectively. Expressed in selected regions of the brain as well as the eye, NXNL2 maps to human chromosome 9q22.1 and mouse chromosome 13 A5. Two isoforms exist as a result of alternative splicing events.

REFERENCES

1. Holmgren, A. 1995. Thioredoxin structure and mechanism: conformational changes on oxidation of the active-site sulfhydryls to a disulfide. Structure 3: 239-243.
2. Martin, J.L. 1995. Thioredoxin—a fold for all reasons. Structure 3: 245-250.
3. Kurooka, H., Kato, K., Minoguchi, S., Takahashi, Y., Ikeda, J., Habu, S., Osawa, N., Buchberg, A.M., Moriwaki, K., Shisa, H. and Honjo, T. 1997. Cloning and characterization of the nucleoredoxin gene that encodes a novel nuclear protein related to thioredoxin. Genomics 39: 331-339.
4. Laughner, B.J., Sehnke, P.C. and Ferl, R.J. 1998. A novel nuclear member of the thioredoxin superfamily. Plant Physiol. 118: 987-996.
5. Cronin, T., Raffelsberger, W., Lee-Rivera, I., Jaillard, C., Niepon, M.L., Kinzel, B., Clerin, E., Petrosian, A., Picaud, S., Poch, O., Sahel, J.A. and Lεveillard, T. 2010. The disruption of the rod-derived cone viability gene leads to photoreceptor dysfunction and susceptibility to oxidative stress. Cell Death Differ. 17: 1199-1210.
6. Reichman, S., Kalathur, R.K., Lambard, S., Aït-Ali, N., Yang, Y., Lardenois, A., Ripp, R., Poch, O., Zack, D.J., Sahel, J.A. and Leveillard, T. 2010. The homeobox gene CHX10/VSX2 regulates RdCVF promoter activity in the inner retina. Hum. Mol. Genet. 19: 250-261.
7. Lambard, S., Reichman, S., Berlinicke, C., Niepon, M.L., Goureau, O., Sahel, J.A., Leveillard, T. and Zack, D.J. 2010. Expression of rod-derived cone viability factor: dual role of CRX in regulating promoter activity and cell-type specificity. PLoS ONE 5: e13075.

CHROMOSOMAL LOCATION

Genetic locus: Nxnl2 (mouse) mapping to 13 A5.

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.

PRODUCT

NXNL2 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 NXNL2 shRNA Plasmid (m): sc-150133-SH and NXNL2 shRNA (m) Lentiviral Particles: sc-150133-V as alternate gene silencing products.

For independent verification of NXNL2 (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-150133A, sc-150133B and sc-150133C.

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

NXNL2 siRNA (m) is recommended for the inhibition of NXNL2 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 NXNL2 gene expression knockdown using RT-PCR Primer: NXNL2 (m)-PR: sc-150133-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.