

# 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 in



# SLC25A35 siRNA (m): sc-153513



The Power to Question

## **BACKGROUND**

Members of the SLC25 family of mitochondrial carrier proteins are known transporters of molecules over the mitochondrial membrane and are highly expressed in the central nervous system. SLC25A35 (solute carrier family 25, member 35) is a 300 amino acid multi-pass membrane protein belonging to the SLC25 family of mitochondrial carrier proteins. Localizing to the inner mitochondrial membrane and containing three solcar repeats, SLC25A35 exists as four alternatively spliced isoforms. The gene encoding SLC25A35 is located on human chromosome 17p13.1. Chromosome 17 makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes. Neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth are both linked to mutations on Chromosome 17. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

## **REFERENCES**

- Naito, E., Ito, M., Matsuura, S., Yokota, T., Ogawa, Y., Kitamura, S., Kobayashi, K., Saheki, T., Nishimura, Y., Sakura, N. and Kuroda, Y. 2002. Type II citrullinaemia (citrin deficiency) in a neonate with hypergalactosaemia detected by mass screening. J. Inherit. Metab. Dis. 25: 71-76.
- Fujisaki, S., Sugiyama, A., Eguchi, T., Watanabe, Y., Hiraiwa, H., Honma, D., Saito, T. and Yasue, H. 2004. Analysis of a full-length cDNA library constructed from swine olfactory bulb for elucidation of expressed genes and their transcription initiation sites. J. Vet. Med. Sci. 66: 15-23.
- Nusbaum, R., Vogel, K.J. and Ready, K. 2006. Susceptibility to breast cancer: hereditary syndromes and low penetrance genes. Breast Dis. 27: 21-50.
- Haitina, T., Lindblom, J., Renström, T. and Fredriksson, R. 2006. Fourteen novel human members of mitochondrial solute carrier family 25 (SLC25) widely expressed in the central nervous system. Genomics 88: 779-790.
- 5. Pang, E.Y., Bai, A.H., To, K.F., Sy, S.M., Wong, N.L., Lai, P.B., Squire, J.A. and Wong, N. 2007. Identification of PFTAIRE protein kinase 1, a novel cell division cycle-2 related gene, in the motile phenotype of hepatocellular carcinoma cells. Hepatology 46: 436-445.
- Farrell, C.J. and Plotkin, S.R. 2007. Genetic causes of brain tumors: neurofibromatosis, tuberous sclerosis, von Hippel-Lindau, and other syndromes. Neurol Clin. 25: 925-946.
- 7. Marobbio, C.M., Giannuzzi, G., Paradies, E., Pierri, C.L. and Palmieri, F. 2008.  $\alpha$ -Isopropylmalate, a leucine biosynthesis intermediate in yeast, is transported by the mitochondrial oxalacetate carrier. J. Biol. Chem. 283: 28445-28453.
- 8. Murakami, N., Tsuchiya, T., Kanazawa, N., Tsujino, S. and Nagai, T. 2008. Novel deletion mutation in GFAP gene in an infantile form of Alexander disease. Pediatr. Neurol. 38: 50-52.

## **PROTOCOLS**

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

#### **CHROMOSOMAL LOCATION**

Genetic locus: Slc25a35 (mouse) mapping to 11 B3.

## **PRODUCT**

SLC25A35 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  $\mu M$  solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SLC25A35 shRNA Plasmid (m): sc-153513-SH and SLC25A35 shRNA (m) Lentiviral Particles: sc-153513-V as alternate gene silencing products.

For independent verification of SLC25A35 (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-153513A, sc-153513B and sc-153513C.

#### 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  $\mu$ l of the RNAse-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNAse-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

# **APPLICATIONS**

SLC25A35 siRNA (m) is recommended for the inhibition of SLC25A35 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 SLC25A35 gene expression knockdown using RT-PCR Primer: SLC25A35 (m)-PR: sc-153513-PR (20  $\mu$ 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com