



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](https://www.linkedin.com/company/szaboscandic) 

SDSL siRNA (m): sc-153292

BACKGROUND

L-serine dehydratase, known simply as serine dehydratase (SDS), is one of three main enzymes that are involved in the metabolism of glycine and serine. Specifically, L-serine dehydratase localizes to the liver and functions to enzymatically convert L-serine to pyruvate and ammonia in a pyridoxal phosphate-dependent manner. SDSL (serine dehydratase-like), also known as SDS-RS1 or Serine dehydratase 2, is a 329 amino acid protein that, like L-serine dehydratase, uses pyridoxal phosphate. One of several members of the serine/threonine dehydratase family, SDSL may function as a serine-specific dehydratase that plays a role in protein metabolism.

REFERENCES

- Ogawa, H., Gomi, T., Konishi, K., Date, T., Nakashima, H., Nose, K., Matsuda, Y., Peraino, C., Pitot, H.C. and Fujioka, M. 1989. Human liver serine dehydratase. cDNA cloning and sequence homology with hydroxylamino acid dehydratases from other sources. *J. Biol. Chem.* 264: 15818-15823.
- Xue, H.H., Sakaguchi, T., Fujie, M., Ogawa, H. and Ichiyama, A. 1999. Flux of the L-serine metabolism in rabbit, human, and dog livers. Substantial contributions of both mitochondrial and peroxisomal serine:pyruvate/alanine:glyoxylate aminotransferase. *J. Biol. Chem.* 274: 16028-16033.
- Sun, L., Li, X., Dong, Y., Yang, M., Liu, Y., Han, X., Zhang, X., Pang, H. and Rao, Z. 2003. Crystallization and preliminary crystallographic analysis of human serine dehydratase. *Acta Crystallogr. D, Biol. Crystallogr.* 59: 2297-2299.
- Kashii, T., Gomi, T., Oya, T., Ishii, Y., Oda, H., Maruyama, M., Kobayashi, M., Masuda, T., Yamazaki, M., Nagata, T., Tsukada, K., Nakajima, A., Tatsu, K., Mori, H., Takusagawa, F., Ogawa, H. and Pitot, H.C. 2005. Some biochemical and histochemical properties of human liver serine dehydratase. *Int. J. Biochem. Cell Biol.* 37: 574-589.
- López-Flores, I., Barroso, J.B., Valderrama, R., Esteban, F.J., Martínez-Lara, E., Luque, F., Peinado, M.A., Ogawa, H., Lupiáñez, J.A. and Peragón, J. 2005. Serine dehydratase expression decreases in rat livers injured by chronic thioacetamide ingestion. *Mol. Cell. Biochem.* 268: 33-43.

CHROMOSOMAL LOCATION

Genetic locus: *Sdsl* (mouse) mapping to 5 F.

PRODUCT

SDSL siRNA (m) is a target-specific 19-25 nt siRNA designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SDSL shRNA Plasmid (m): sc-153292-SH and SDSL shRNA (m) Lentiviral Particles: sc-153292-V as alternate gene silencing products.

PROTOCOLS

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

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

APPLICATIONS

SDSL siRNA (m) is recommended for the inhibition of SDSL 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 μ M in 66 μ l. 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 SDSL gene expression knockdown using RT-PCR Primer: SDSL (m)-PR: sc-153292-PR (20 μ 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.