

Product datasheet for SR422252

OriGene Technologies, Inc.

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Sorcs2 Mouse siRNA Oligo Duplex (Locus ID 81840)

Product data:

Product Type: siRNA Oligo Duplexes

Purity: HPLC purified

Quality Control: Tested by ESI-MS

Sequences: Available with shipment

Stability: One year from date of shipment when stored at -20°C.

of transfections: Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final

conc. 10 nM).

Note: Single siRNA duplex (10nmol) can be ordered.

RefSeq: <u>NM 030889</u>

UniProt ID: Q9EPR5

Synonyms: mKIAA1329; N28137

Components: Sorcs2 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 81840)

Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol

Included - SR30005, RNAse free siRNA Duplex Resuspension Buffer - 2 ml

Summary: The heterodimer formed by NGFR and SORCS2 functions as receptor for the precursor forms

of NGF (proNGF) and BDNF (proBDNF) (PubMed:22155786, PubMed:24908487,

PubMed:27457814, PubMed:29909994). ProNGF and proBDNF binding both promote axon growth cone collapse (in vitro) (PubMed:24908487). Plays a role in the regulation of dendritic spine density in hippocampus neurons (PubMed:29909994). Required for normal neurite branching and extension in response to BDNF (PubMed:27457814, PubMed:29909994). Plays

a role in BDNF-dependent hippocampal synaptic plasticity (PubMed:29909994,

PubMed:27457814). Together with NGFR and NTRK2, is required both for BDNF-mediated synaptic long-term depression and long-term potentiation (PubMed:27457814). ProNGF binding promotes dissociation of TRIO from the heterodimer, which leads to inactivation of RAC1 and/or RAC2 and subsequent reorganization of the actin cytoskeleton (By similarity). Together with the retromer complex subunit VPS35, required for normal expression of GRIN2A at synapses and dendritic cell membranes (PubMed:28469074). Required for normal expression of the amino acid transporter SLC1A1 at the cell membrane, and thereby

contributes to protect cells against oxidative stress (PubMed:30840898).[UniProtKB/Swiss-

Prot Function]





Performance Guaranteed:

OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will provide at least 70% or more knockdown of the target mRNA when used at 10 nM concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT positive control (cat# SR30003) provides 90% knockdown efficiency.

For non-conforming siRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with newly designed duplexes, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled siRNA control (quantitative RT-PCR data required).