

Product datasheet for SR423175

OriGene Technologies, Inc.

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Nalcn Mouse siRNA Oligo Duplex (Locus ID 338370)

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 177393</u>, <u>NM 177754</u>

UniProt ID: Q8BXR5

Synonyms: A530023G15Rik; Al849508; Vgcnl1

Components: Nalcn (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 338370)

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

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

Summary: Voltage-independent, cation-nonselective channel which is permeable to sodium, potassium

and calcium ions (PubMed:17448995). Regulates the resting membrane potential and controls neuronal excitability. Neuropeptides such as neurotensin and substance P (SP) stimulate the firing of action potentials by activating NALCN through a SRC family kinases-dependent pathway (PubMed:19092807). In addition to its baseline activity, NALCN activity is

enhanced/modulated by several GPCRs (PubMed:19092807, PubMed:19575010,

PubMed:21040849). Required for normal respiratory rhythm and neonatal survival. Involved

in systemic osmoregulation by controlling the serum sodium concentration

(PubMed:21177381). NALCN is partly responsible for the substance P-induced depolarization

and regulation of the intestinal pace-making activity in the interstitial cells of Cajal (PubMed:22508057). Plays a critical role in both maintenance of spontaneous firing of substantia nigra pars reticulata (SNr) neurons and physiological modulation of SNr neuron

excitability (PubMed:27177420).[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).