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Product datasheet for TL508518V

Nalcn Mouse shRNA Lentiviral Particle (Locus ID 338370)

Product data:

Product Type:	shRNA Lentiviral Particles
Locus ID:	338370
Synonyms:	A530023G15Rik; AI849508; Vgcnl1
Vector:	pGFP-C-shLenti (TR30023)
Format:	Lentiviral particles
Components:	Nalcn - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble control), 0.5 ml each, >10^7 TU/ml.
RefSeq:	NM_177393, NM_177393.1, NM_177393.2, NM_177393.3, NM_177393.4, NM_177754
UniProt ID:	Q8BXR5
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]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

Performance Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, 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 shRNA control (Western Blot data preferred).