

Product datasheet for **TR300581**

VGCNL1 (NALCN) Human shRNA Plasmid Kit (Locus ID 259232)

Product data:

Product Type:	shRNA Plasmids
Product Name:	VGCNL1 (NALCN) Human shRNA Plasmid Kit (Locus ID 259232)
Locus ID:	259232
Synonyms:	bA430M15.1; Canlon; CLIFAHDD; IHPRF; IHPRF1; INNFD; VGCNL1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	NALCN - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 259232). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_052867 , NM_001350748 , NM_001350749 , NM_001350750 , NM_001350751 , NM_052867.1 , NM_052867.2 , BC012128 , BC028390 , BC064343 , NM_052867.4
UniProt ID:	Q8IZF0
Summary:	This gene encodes a voltage-independent, nonselective cation channel which belongs to a family of voltage-gated sodium and calcium channels that regulates the resting membrane potential and excitability of neurons. This family is expressed throughout the nervous system and conducts a persistent sodium leak current that contributes to tonic neuronal excitability. The encoded protein forms a channelosome complex that includes G-protein-coupled receptors, UNC-79, UNC-80, NCA localization factor-1, and src family tyrosine kinases. Naturally occurring mutations in this gene are associated with infantile neuroaxonal dystrophy, infantile hypotonia with psychomotor retardation and characteristic facies (IHPRF) syndrome, and congenital contractures of the limbs and face with hypotonia and developmental delay (CLIFAHDD) syndrome. A knockout of the orthologous gene in mice results in paralysis with a severely disrupted respiratory rhythm, and lethality within 24 hours after birth. [provided by RefSeq, Apr 2017]
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 .



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**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).