

## **Product datasheet for TR309619**

## OriGene Technologies, Inc.

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## SCN11A Human shRNA Plasmid Kit (Locus ID 11280)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** SCN11A Human shRNA Plasmid Kit (Locus ID 11280)

**Locus ID:** 11280

Synonyms: FEPS3; HSAN7; NaN; NAV1.9; PN5; SCN12A; SNS-2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: SCN11A - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

11280). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 001287223, NM 014139, NM 001349253, NM 014139.1, NM 014139.2, NM 001287223.1,

BC172234, NM 014139.3

UniProt ID: 09UI33

**Summary:** Voltage-gated sodium channels are transmembrane glycoprotein complexes composed of a

large alpha subunit with 24 transmembrane domains and one or more regulatory beta subunits. They are responsible for the generation and propagation of action potentials in neurons and muscle. This gene encodes one member of the sodium channel alpha subunit gene family, and is highly expressed in nociceptive neurons of dorsal root ganglia and trigeminal ganglia. It mediates brain-derived neurotrophic factor-evoked membrane depolarization and is a major effector of peripheral inflammatory pain hypersensitivity. Mutations in this gene have been associated with hereditary sensory and autonomic neuropathy type VII and familial episodic pain syndrome-3. Alternative splicing results in

multiple transcript variants. [provided by RefSeq, Mar 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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







## 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).