

Product datasheet for TG309612

OriGene Technologies, Inc.

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Nav1.5 (SCN5A) Human shRNA Plasmid Kit (Locus ID 6331)

Product data:

Product Type: shRNA Plasmids

Product Name: Nav1.5 (SCN5A) Human shRNA Plasmid Kit (Locus ID 6331)

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Synonyms: CDCD2; CMD1E; CMPD2; HB1; HB2; HBBD; HH1; ICCD; IVF; LQT3; Nav1.5; PFHB1; SSS1; VF1

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: SCN5A - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 6331).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 000335, NM 001099404, NM 001099405, NM 001160160, NM 001160161, NM 198056,

NM 001354701, NM 001099405.1, NM 000335.1, NM 000335.2, NM 000335.3, NM 000335.4,

NM 198056.1, NM 198056.2, NM 001099404.1, NM 001160161.1, NM 001160160.1, BC140813, BC051374, BC144621, NM 001160161.2, NM 001099405.2, NM 001099404.2,

NM 000335.5, NM 198056.3

UniProt ID: Q14524

Summary: The protein encoded by this gene is an integral membrane protein and tetrodotoxin-resistant

voltage-gated sodium channel subunit. This protein is found primarily in cardiac muscle and is responsible for the initial upstroke of the action potential in an electrocardiogram. Defects in this gene are a cause of long QT syndrome type 3 (LQT3), an autosomal dominant cardiac disease. Alternative splicing results in several transcript variants encoding different isoforms.

[provided by RefSeq, Jul 2008]

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 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).