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# Product datasheet for TL309618

## SCN1A Human shRNA Plasmid Kit (Locus ID 6323)

### Product data:

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|---|---|
| **Product Type:** | shRNA Plasmids |
| **Product Name:** | SCN1A Human shRNA Plasmid Kit (Locus ID 6323) |
| **Locus ID:** | 6323 |
| **Synonyms:** | DEE6; DEE6A; DEE6B; DRVT; EIEE6; FEB3; FEB3A; FHM3; GEFSP2; HBSCI; NAC1; Nav1.1; SCN1; SMEI |
| **Vector:** | pGFP-C-shLenti (TR30023) |
| **E. coli Selection:** | Chloramphenicol (34 ug/ml) |
| **Mammalian Cell Selection:** | Puromycin |
| **Format:** | Lentiviral plasmids |
| **Components:** | SCN1A - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 6323).<br>5µg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free. |
| **RefSeq:** | NM_001165963, NM_001165964, NM_001202435, NM_006920, NM_001353948, NM_001353949, NM_001353950, NM_001353951, NM_001353952, NM_001353954, NM_001353955, NM_001353957, NM_001353958, NM_001353960, NM_001353961, NR_148667, NM_006920.1, NM_006920.2, NM_006920.3, NM_006920.4, NM_001165964.1, NM_001165963.1, NM_001202435.1, NM_001165964.3, NM_001202435.3, NM_001165963.4, NM_006920.6 |
| **UniProt ID:** | P35498 |

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**Summary:**

Voltage-dependent sodium channels are heteromeric complexes that regulate sodium exchange between intracellular and extracellular spaces and are essential for the generation and propagation of action potentials in muscle cells and neurons. Each sodium channel is composed of a large pore-forming, glycosylated alpha subunit and two smaller beta subunits. This gene encodes a sodium channel alpha subunit, which has four homologous domains, each of which contains six transmembrane regions. Allelic variants of this gene are associated with generalized epilepsy with febrile seizures and epileptic encephalopathy. Alternative splicing results in multiple transcript variants. The RefSeq Project has decided to create four representative RefSeq records. Three of the transcript variants are supported by experimental evidence and the fourth contains alternate 5' untranslated exons, the exact combination of which have not been experimentally confirmed for the full-length transcript. [provided by RefSeq, Oct 2015]

**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).