

## Product datasheet for **TL709282**

### Scn2a Rat shRNA Plasmid (Locus ID 24766)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Scn2a Rat shRNA Plasmid (Locus ID 24766)
Locus ID:	24766
Synonyms:	NachII; Nav1.2; RII/RIIA; RNSCPIIR; SCN; Scn2a1; Scn2a2; ScpII
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	Scn2a1 - Rat, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 24766). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<a href="#">NM_012647</a> , <a href="#">NM_012647.1</a>
UniProt ID:	<a href="#">P04775</a>
Summary:	Voltage-gated sodium channels are transmembrane glycoprotein complexes composed of a large alpha subunit with four repeat domains, each of which is composed of six membrane-spanning segments, and one or more regulatory beta subunits. Voltage-gated sodium channels 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. In humans, variants of this gene are associated with seizure disorders and autism spectrum disorder. Mice homozygous for a knockout mutation die with severe hypoxia and extensive neuronal cell death, while gain of function mutations result in progressive seizure disorder. [provided by RefSeq, Nov 2016]
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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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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](mailto: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).