

## Product datasheet for **RN206256**

### Scn2a (NM\_012647) Rat Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Scn2a (NM_012647) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Scn2a
Synonyms:	NachII; Nav1.2; RII/RIIA; RNSCPIIR; SCN; Scn2a1; Scn2a2; ScpII
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>RN206256 representing NM_012647 Red=Cloning site Blue=ORF Orange=Stop codon

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GCC**CGATCGCC**

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<b>Restriction Sites:</b>	Sgfl-Mlul
<b>ACCN:</b>	NM_012647
<b>Insert Size:</b>	6018 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_012647.1</a> , <a href="#">NP_036779.1</a>
<b>RefSeq Size:</b>	8553 bp
<b>RefSeq ORF:</b>	6018 bp
<b>Locus ID:</b>	24766
<b>UniProt ID:</b>	<a href="#">P04775</a>
<b>Cytogenetics:</b>	3q21

**Gene 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]