

## Product datasheet for RC240210

### SCN11A (NM\_001287223) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SCN11A (NM_001287223) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SCN11A
Synonyms:	FEPS3; HSAN7; NaN; NAV1.9; PN5; SCN12A; SNS-2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC240210 representing NM_001287223 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

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 GCAATGGAGACTTGTCTAGCTTTGGGGTGGCCAAGGGCAAGGTCCACTGTGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC240210 representing NM\_001287223  
 Red=Cloning site Green=Tags(s)

MDDRCYPVIFPDERNFRPFTSDSLAAIEKRIAIQKEKKKSKDQTGEVPPRPQLDLKASRKLPLKLYGDIP  
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 INCVFMATGPAKNSNSNNTDIAECVFTGIYIFEALIKILARGFILDEFSLRDPWNWLDIVIGIAIVSY  
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 KPQLLEQTKRLSQNLSDHFDEHGDPLQRQRALSAVSILITIMKEQEKSQEPCLPCGENLASKYL VWNCC  
 PQWL CVKQVLRVTMPDPTLAIITICIIINTVFLAMEHHKMEASFEMLNIGLVFTSIFIAEMCLKIIA  
 LDPYHYFRRGWNIFDSIVALLSFADVMNCVLQKRSWFLRSFRVLRVFKLAKSWPTLNTLKIIGNSVGA  
 LGSLTVVLVIVIFISVVGMLFGRSFNSQKSPKLCNPTGPTVSCLRHWHMGGDFWHSFLVFRILCGEWI  
 ENMWEQEQEANASSSLCVIVFILITVIGKLVVNLFIALLNSFSNEERNGNLEGEARKTKVQLALDRFR  
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 QIVKHSWFESFII FVILLSSGALIFEDVHLENQPKIQELLNCTDIIFTHIFILEMVLKWWAFGFGKYFTS  
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 DIIYAAVDSTEKEQQPEFESNSLGYIYFVVFIIFGSFFTLNLFIGVIIDNFNQKQLGGQDIFMTEEQK  
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 LNWFVVI FTLECLIKIFALRQYYFTNGWNL FDCVVVLLSIVSTMI STLENQEHIPFPPTLFRIVRLARI  
 GRILRLVRAARGIRTL LFALMMSLPSLFNIGLLLFLIMFIYAILGMNWF SKVNPESGIDDFNFKTFASS  
 MLCLFQIST SAGWDSLLSPMLRSKESCSNSENCHLPGIATS YFVSYIIISFLIVNMYIAVILENFNTA  
 TEESEDPLGEDDFDI FYEVWEKFDPEATQFIKYSAL SDFADALPEPLRVAKPNKYQFLVMDLPMVSEDRL  
 HCMDILFAFTARVLGGSDGLDSMKAMMEEFMEANPLKLYEPIVTTTKRKEEERGAIIQKAFRKYMMK  
 VTKGDQGDQNDLENGPHSPLQTL CNGDLSFGVAKGVHCD

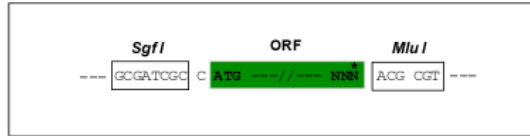
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

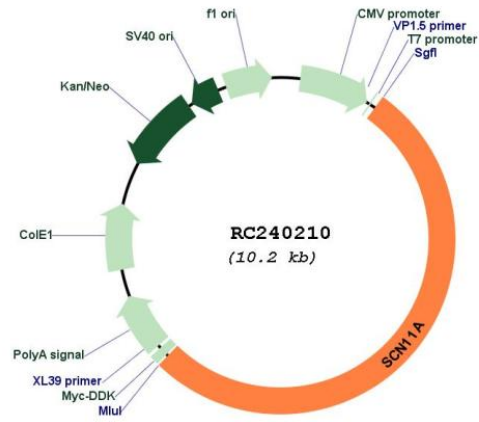
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



<b>ACCN:</b>	NM_001287223
<b>ORF Size:</b>	5373 bp
<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_001287223.1</a> , <a href="#">NP_001274152.1</a>
<b>RefSeq Size:</b>	6331 bp
<b>RefSeq ORF:</b>	5376 bp
<b>Locus ID:</b>	11280
<b>UniProt ID:</b>	<a href="#">Q9UI33</a>
<b>Cytogenetics:</b>	3p22.2
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Sodium, Transmembrane
<b>MW:</b>	204.9 kDa
<b>Gene Summary:</b>	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]