

## Product datasheet for **RG240210**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SCN11A (NM_001287223) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SCN11A
Synonyms:	FEPS3; HSAN7; NaN; NAV1.9; PN5; SCN12A; SNS-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG240210 representing NM_001287223. Blue=ORF Red=Cloning site Green=Tag(s)

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 ACTCTTTGCAATGGAGACTTGTCTAGCTTTGGGGTGGCCAAGGGCAAGGTCCACTGTGAC  
 ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

**Protein Sequence:**

>Peptide sequence encoded by RG240210  
 Blue=ORF Red=Cloning site Green=Tag(s)

MDDRCYPVIFPDERNFRPFTSDSLAAIEKRIAIQKEKKKSKDQTGEVPPRPQLDLKASRKLPLKLYGDI  
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 FSKVNPESGIDDFNFKTFASSMLCLFQISTASAGWDSLLSPMLRSKESCSNSENCHLPGIATSIFYVSY  
 IISFLIVVNMVIAVILENFNTATEESEDPLGEDDFDIFYEVWEKFDPEATQFIKYSALSDFADALPEP  
 LRVAKPNKYQFLVMDLPMYSEDRLHCMDILFAFTARVLGGSDGLDSMKAMMEEFMEANPLKLYEPIV  
 TTTKRKEEERGAIIQKAFRKYMMKVTKGDQGDQNDLENGPHSPLQTLNCGDLSFGVAKGVHCD  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_001287223

ORF Size: 5373 bp

OTI Disclaimer: 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. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: 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).

RefSeq: [NM\\_001287223.1](#), [NP\\_001274152.1](#)

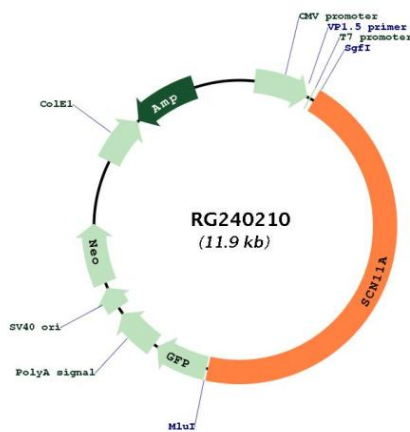
RefSeq Size: 6331 bp

RefSeq ORF: 5376 bp

**Locus ID:** 11280  
**UniProt ID:** [Q9UI33](#)  
**Cytogenetics:** 3p22.2  
**Protein Families:** Druggable Genome, Ion Channels: Sodium, Transmembrane  
**MW:** 204.9 kDa

**Gene Summary:** 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]

**Product images:**



Circular map for RG240210