

## Product datasheet for **SC338104**

### SCN11A (NM\_001287223) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SCN11A (NM\_001287223) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** SCN11A  
**Synonyms:** FEPS3; HSAN7; NaN; NAV1.9; PN5; SCN12A; SNS-2  
**Mammalian Cell Selection:** None  
**Vector:** [pCMV6-XL5](#)  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_014139 edited  
GGTACCATGGATGACAGATGCTACCCAGTAATCTTTCCAGATGAGCGGAATTTCCGCCCC  
TTCACCTCCGACTCTCTGGCTGCAATTGAGAAGCGGATTGCCATCCAAAAGGAGAAAAAG  
AAGTCTAAAGACCAGACAGGAGAAGTACCCAGCCTCGGCCTCAGCTTGACCTAAAGGCC  
TCCAGGAAGTTGCCAAGCTCTATGGCGACATTCTCGTGAGCTCATAGGAAAGCCTCTG  
GAAGACTTGACCATTCTACCGAAATCATAAGACATTTATGGTGTAAACAGAAAGAGG  
ACAATCTACCGCTTCAGTGCCAAGCATGCCTTGTTCAATTTTTGGGCCTTCAATTCAATC  
AGAAGTTTAGCCATTAGAGTCTCAGTCCATTATTGTTTCAGCATGTTTATTATCGGCACC  
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ACTGACATTGCAGAGTGTCTTACTGGGATTTATATTTTTGAAGCTTTGATTAATAA  
TTGGCAAGAGTTTCACTTCTGGATGAGTTTTCTTCTTCGAGATCCATGGAAGTGGCTG  
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CTGAACCTGAAATGCATCTCGAGGGACTGTAAAAATATCAGTAACCCGGAAGCTTATGAC  
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AAACGACTGTCCAGAATCTACTGACCACCTTGTGATGAGCATGGAGATCCTCTCCAA



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AGGCAGAGAGCACTGAGTGTCTGTCAGCATCCTCACCATCACCATGAAGGAACAAGAAAA  
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 CACAAGATGGAGGCCAGTTTTGAGAAGATGTTGAATATAGGGAATTTGGTTTTACTAGC  
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 TTAGGATCCAAAAAACCTCAAAAACCCATTCCACGGCCTCTGAACAAATGTCAAGGTCTC  
 GTGTTTCGACATAGTCACAAGCCAGATCTTTGACATCATCATCATAAGTCTCATTATCCTA  
 AACATGATTAGCATGATGGCTGAATCATACAACCAACCCAAAGCCATGAAATCCATCCTT  
 GACCATCTCAACTGGGCTTTTGGTTCATCTTTACGTTAGAATGTCTCATCAAAATCTTT  
 GCTTTGAGGCAATACTACTTCACCAATGGCTGGAATTTATTTGACTGTGTGGTCTGCTT  
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 GCTGCACGAGGAATCAGGACTCTCCTCTTGTCTGATGATGTCGCTTCCTTCTCTGTTC  
 AACATTGGTCTTCTACTCTTTCTGATTATGTTTATCTATGCCATTCTGGGTATGAACTGG  
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CCCATGCTGCGATCAAAAGAATCATGTAACCTCTCCTCAGAAAAGTCCACCTCCCTGGC
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TACATTGCTGTGATTTTAGAGAACTTCAATACAGCCACTGAAGAAAAGTGAGGACCCTTTG
GGTGAAGATGACTTTGACATATTTTATGAAGTGTGGGAAAAGTTTGACCCAGAAGCAACA
CAATTTATCAAATATTCTGCCCTTTCTGACTTTGCTGATGCCTTGCTGAGCCTTTGCGT
GTCGCAAAGCCAAATAAATATCAATTTCTAGTAATGGACTTGCCCATGGTGAGTGAAGAT
CGCCTCCACTGCATGGATATTCTTTTCGCCTTCACCGCTAGGGTACTCGGTGGCTCTGAT
GGCCTAGATAGTATGAAAGCAATGATGGAAGAGAAGTTCATGGAAGCCAATCCTCTCAAG
AAGTTGTATGAACCCATAGTCACCACCACCAAGAGAAAAGGAAAGAGGAAAGAGGTGCTGCT
ATTATTCAAAGGCCCTTCGAAAGTACATGATGAAGGTGACCAAGGGTGACCAAGGTGAC
CAAATGACTTGAAAACGGGCCTCATTCACTCCAGACTCTTTGCAATGGAGACTTG
TCTAGCTTTGGGTGGCCAAGGGCAAGGTCCACTGTGACTGATCTAGA
    
```

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001287223

**Insert Size:** 5376 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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).

**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).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

**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

**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]  
Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Both variants 1 and 2 encode the same protein.