

Product datasheet for **SC300049**

SCN4A (NM_000334) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SCN4A (NM_000334) Human Untagged Clone
Tag:	Tag Free
Symbol:	SCN4A
Synonyms:	CMS16; HOKPP2; HYKPP; HYPP; Na(V)1.4; NAC1A; Nav1.4; SkM1
Mammalian Cell Selection:	Neomycin
Vector:	<u>PCMV6-Neo</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_000334 edited
 ATGGCCAGACCATCTCTGTGCACCTGGTGCCTCTGGGCCCTGAGTGCTTGCGCCCTTC
 ACCCGGAGTCACTGGCAGCCATAGAACAGCGGGCGGTGGAGGAGGAGGCCCGGCTGCAG
 CGGAATAAGCAGATGGAGATTGAGGAGCCGAACGGAAGCCACGAAGTGACTTGGAGGCT
 GGCAAGAACCTACCCATGATCTACGGAGACCCCGCGGAGGTCATCGGCATCCCCCTG
 GAGGACCTGGATCCCTACTACAGCAATAAGAAGACCTTCATCGTACTCAACAAGGCAAG
 GCCATCTTCCGCTTCTCCGCCACACCTGCTCTCTACCTGCTGAGCCCTTCAGCGTAGTC
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 ATCTTGACCAACTGCGTATTCATGACCATGAGTGACCCGCTCCCTGGTCCAAGAATGTG
 GAGTACACCTTCACAGGATCTACACCTTTGAGTCCCTCATCAAGATACTGGCCCGAGGC
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 GAGCTGGAGAAGGCCAAGGCCCAAGCTCTGGAAGGTGGGAGGCAGATGGGGACCCA
 GCCCATGGCAAAGACTGCAATGGCAGCCTGGACACATCGCAAGGGGAGAAGGGAGCCCCG



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AGGCAGAGCAGCAGCGGAGACAGCGGCATCTCCGACGCCATGGAAGAACTGGAAGAGGCC
 CACCAAAAGTGCCACCATGGTGGTACAAGTGCGCCACAAAGTGCTCATATGGAAGTGC
 TGCGCCCCGTGGCTGAAGTTCAAGAACATCCACCTGATCGTCATGGACCCGTTCTG :
 GGACCTGGGCATCACCATCTGCATCGTGTCTCAACACCCTTTCATGGCCATGGAACATTA
 CCCCATGACGGAGCACTTTGACAACGTGCTCACTGTGGCAACCTGGTCTTCACAGGCAT
 CTTACAGCAGAGATGGTTCTGAAGCTGATTGCCATGGACCCCTACGAGTATTTCCAGCA
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 TGCCCTCTTCAACATCGGCCTCCTCCTTCTTCTGGTCATGTTTCATCTACTCCATCTTCGG
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 GCTCCTCAACCCATCCTCAACAGCGGGCCCCAGACTGTGACCCCAACCTGGAGAACC

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GGGCACCAGTGTCAAGGGTGACTGCGGCAACCCCTCCATCGGCATCTGCTTCTTCTGCAG
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CTACGAGACATGGGAGAAGTTCGACCCCGACGCCACCCAGTTCATCGCCTACAGCCGCCT
CTCAGACTTCGTGGACACCCTGCAGGAACCGCTGAGGATTGCCAAGCCCAACAAGATCAA
GCTCATCACACTGGACTTGCCCATGGTGCCAGGGGACAAGATCCACTGCCTGGACATCCT
CTTTGCCCTGACCAAAGAGGTCTGGGTGACTCTGGGGAATGGACGCCCTCAAGCAGAC
CATGGAGGAGAAGTTCATGGCAGCCAACCCCTCCAAGGTGTCTACGAGCCCATACCAC
CACCCCTCAAGAGGAAGCAGGAGGAGGTGTGCGCCATCAAGATCCAGAGGGCCTACCGCCG
GCACCTGTACAGCGCTCCATGAAGCAGGCATCCTACATGTACCGCCACAGCCACGACGG
CAGCGGGGATGACGCCCTGAGAAGGAGGGGCTGCTTGCCAACCCATGAGCAAGATGTA
TGGCCACGAGAATGGGAACAGCAGCTCGCCAAGCCCGAGGAGAAGGGCGAGGCAGGGGA
CGCCGGACCCACTATGGGGCTGATGCCATCAGCCCTCAGACTGCCTGGCCTCCCGC
CCCTCCCCAGGGCAGACTGTGCGCCAGGTGTCAAGGAGTCTCTGTCTAG
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- Restriction Sites:** Please inquire
- ACCN:** NM_000334
- Insert Size:** 6100 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 or by calling 301.340.3188 option 3 for pricing and delivery.
- 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:** The open reading frame of this clone has been fully sequenced and found one SNP within the protein associated with this reference, NM_000334.3. This SNP changes amino acid.
- 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_000334.3](#), [NP_000325.3](#)
- RefSeq Size:** 7823 bp

RefSeq ORF: 5511 bp

Locus ID: 6329

UniProt ID: [P35499](#)

Cytogenetics: 17q23.3

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. It is expressed in skeletal muscle, and mutations in this gene have been linked to several myotonia and periodic paralysis disorders. [provided by RefSeq, Jul 2008]