

Product datasheet for **SC316038**

SCN3A (NM_001081677) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: SCN3A (NM_001081677) Human Untagged Clone
Tag: Tag Free
Symbol: SCN3A
Synonyms: DEE62; EIEE62; FFEVF4; NAC3; Nav1.3
Mammalian Cell Selection: None
Vector: pCMV6-XL4
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_001081677 edited
 ATGGCACAGGCACTGTTGGTACCCCAAGGACCTGAAAGCTTCCGCCTTTTACTAGAGAA
 TCTCTTGCTGCTATCGAAAAACGTGCTGCAGAAGAGAAAGCCAAAGCCAAAAAGGAA
 CAAGATAATGATGATGAGAACAACCAAGCCAAATAGTGACTTGAAGCTGGAAAAGAAC
 CTTCATTATTTATGGAGACATTCTCCAGAGATGGTGTGAGAGCCCTGGAGGACCTG
 GATCCCTACTATCAATAAGAAAACCTTTATAGTAATGAATAAAGGAAAGGCAATTTTC
 CGATTCAGTGCCACCTCTGCCTTGATATTTTAACTCCACTAAACCCTGTAGGAAAATT
 GCTATCAAGATTTTGGTACATTTTATTCAGCATGCTTATCATGTGCACTATTTTGACC
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GACAGCTTCCCAAATCCGAATCTGAAGACAGCGTCAAAAAGAAGCAGCTTCCTTTCTCC
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 AGTATCCGTGGCTCCCTGTTTTCCCAAGACGCAATAGCAAAACAAGCATTTCAGTTTC
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TATGATAGTGTAAACAAAACAGACAAGGAAAAGTTTGAGAAAGACAAACCAGAAAAAGAA
AGCAAAGGAAAAGAGGTCAGAGAAAATCAAAGTAA
    
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Restriction Sites:

Please inquire

ACCN:

NM_001081677

Insert Size:

8900 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 to be a perfect match to the protein associated with this reference, NM_001081677.1. This clone may be unstable or toxic at high copy number in common E. coli strain. We recommend using a lower copy number E. coli strain, such as CopyCutter strain (<http://www.epibio.com/item.asp?ID=435>) for transformation and plasmid preparation. Please be aware that the DNA yield could be low. Additional aliquots of this clone can be ordered from OriGene.

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_001081677.1](#), [NP_001075146.1](#)

RefSeq Size: 8994 bp

RefSeq ORF: 5856 bp

Locus ID: 6328

UniProt ID: [Q9NY46](#)

Cytogenetics: 2q24.3

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, and is found in a cluster of five alpha subunit genes on chromosome 2. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (3), also known as the neonatal form, uses an alternate in-frame splice site in the central coding region and an alternate form of an exon in the 5' coding region, compared to variant 1. The resulting isoform (3) is shorter than isoform 1, and contains one amino acid substitution relative to isoform 2.