

Product datasheet for **SC310931**

SCN2A (NM_001040143) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SCN2A (NM_001040143) Human Untagged Clone
Tag:	Tag Free
Symbol:	SCN2A
Synonyms:	BFIC3; BFIS3; BFNIS; DEE11; EA9; EIEE11; HBA; HBSCI; HBSCII; Na(v)1.2; NAC2; Nav1.2; SCN2A1; SCN2A2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene sequence for NM_021007 edited

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GTCTATGCCAAACTGACTGTTTTTACAAATGTATACTTAAGGTCAGTGCCTATAACAAGA
CAGAGACCTCTGGTCAGCAAACCTGGAAC
    
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Restriction Sites:

Please inquire

ACCN:

NM_001040143

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:

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001040143.1](#), [NP_001035233.1](#)

RefSeq Size: 8571 bp

RefSeq ORF: 6018 bp

Locus ID: 6326

UniProt ID: [Q99250](#)

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 four repeat domains, each of which is composed of six membrane-spanning segments, and one or more regulatory beta subunits. Voltage-gated sodium channels function in the generation and propagation of action potentials in neurons and muscle. This gene encodes one member of the sodium channel alpha subunit gene family. Allelic variants of this gene are associated with seizure disorders and autism spectrum disorder. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2016]

Transcript Variant: This variant (3) contains an alternate in-frame exon in the 5' coding region, compared to variant 1. The encoded isoform (2) contains one amino acid substitution relative to isoform 1. **Sequence Note:** This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.