OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC329376

Nav1.6 (SCN8A) (NM_001177984) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nav1.6 (SCN8A) (NM_001177984) Human Untagged Clone
Tag:	Tag Free
Symbol:	SCN8A
Synonyms:	BFIS5; CERIII; CIAT; DEE13; EIEE13; MED; MYOCL2; NaCh6; Nav1.6; PN4
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>NCBI ORF sequence for NM_001177984, the custom clone sequence may differ by one or more nucleotides

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ATGGCAGCGCGGCTGCTTGCACCACCAGGCCCTGATAGTTTCAAGCCTTTCACCCCTGAG
TCACTGGCAAACATTGAGAGGCGCATTGCTGAGAGCAAGCTCAAGAAACCACCAAAGGCC
GATGGCAGTCATCGGGAGGACGATGAGGACAGCAAGCCCAAGCCAAACAGCGACCTGGAA
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GAGGAAGGAAGAAGGGAAAGAGCCAAAAGACAAAAAGAGGTCAGAGAATCCAAGTGTTAG

Restriction Sites: Please inquire

ACCN: NM_001177984

OTI Disclaimer: 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).

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_001177984.1, NP_001171455.1

RefSeq Size: 6968 bp

RefSeq ORF: 5820 bp

Locus ID: 6334

UniProt ID: Q9UQD0

Cytogenetics:	12q13.13
Protein Families:	Druggable Genome, Ion Channels: Sodium, Transmembrane
Gene Summary:	This gene encodes a member of the sodium channel alpha subunit gene family. The encoded protein forms the ion pore region of the voltage-gated sodium channel. This protein is essential for the rapid membrane depolarization that occurs during the formation of the action potential in excitable neurons. Mutations in this gene are associated with cognitive disability, pancerebellar atrophy and ataxia. Alternate splicing results in multiple transcript variants.[provided by RefSeq, May 2010] Transcript Variant: This variant (2) lacks an in-frame exon in the coding region, compared to variant 1. The encoded isoform (2) is shorter than isoform 1. Isoforms 2 and 4 are the same length but differ in their sequence. 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.