

Product datasheet for **SC303782**

Nav1.8 (SCN10A) (NM_006514) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nav1.8 (SCN10A) (NM_006514) Human Untagged Clone
Tag:	Tag Free
Symbol:	Nav1.8
Synonyms:	FEPS2; Nav1.8; PN3; SNS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_006514 edited
 ATGGAATCCCCATTGGATCCCTCGAACTAACAACCTCCGTCGCTTTACTCCGGAGTCA
 CTGGTGGAGATAGAGAAGCAAATGCTGCCAAGCAGGGAACAAAGAAAGCCAGAGAGAAG
 CATAGGGAGCAGAAGGACCAAGAAGAGAAGCCTCGGCCCCAGCTGGACTTGAAAGCCTGC
 AACCCAGCTGCCAAGTTCTATGGTGAGCTCCAGCAGAACTGATCGGGGAGCCCCGAGG
 GATCTAGATCCGTTCTACAGCACACACCCGGACATTTATGGTGCTGAACAAAGGGAGGACC
 ATTTCCCGGTTTGTGCCACTCGGGCCCTGTGGCTATTAGTCCCTTTCAACCTGATCAGA
 AGAACGGCCATCAAAGTGTCTGTCCACTCGTGGTTCAGTTTATTTATTACGGTCACTATT
 TTGGTTAATTGTGTGTGCATGACCCGAAGTACCTTCCAGAGAAAATTGAATATGTCTTC
 ACTGTCATTTACACCTTTGAAGCCTTGATAAAGATACTGGCAAGAGGATTTTGTCTAAAT
 GAGTTCACGTACCTGAGAGATCCTTGAACTGGCTGGATTTTAGCGTCATTACCCTGGCA
 TATGTTGGCACAGCAATAGATCTCCGTGGGATCTCAGGCCTGCGGACATTCAGAGTTCTT
 AGAGCATTAAAAACAGTTTCTGTGATCCCAGGCCTGAAGGTCATTGTGGGGGCCCTGATT
 CACTCAGTGAAGAACTGGCTGATGTGACCATCCTCACCATCTTCTGCCTAAGTGTTTTT
 GCCTTGGTGGGGCTGCAACTCTTCAAGGGCAACCTCAAAAATAAATGTGTCAAGAATGAC
 ATGGCTGTCAATGAGACAACCACTACTCATCTCACAGAAAACAGATATCTACATAAAT
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 GCCCTCGAGATGCTCCGGAAGGAGCAGGAGGTGCTAGCAGCACTAGGGATTGACACAACC
 TCTCTCCACTCCCACAATGGATCACCTTTAACCTCCAAAATGCCAGTGAGAGAAGGCAT
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 CCTTACAACCAGCGCAGGATGTCTTTTCTAGGCCTCGCCTCTGGAAAACGCCGGGCTAGT
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GACTCCAGGCATGGAGAAGTGAACACCAACCGCCGCCCCTAGTGAGCTTGCCCTGGA
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 GGTCCAAGGTAGTCTCTGTGGAGCACCATACAGAGATTGGCAATATTATTTAGGATTTT
 GCATGACTGCATGTGAGAGCTGTGCGACAACCTGCTCTGACCCAGGGTAACACCTGTGCC
 TATGTCATGAAAAGCCTTTGAGATATCCATTAATAATTTTTTAAATGTAAAAAAAA
 AAAAAAAAAAAAAA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_006514 unedited
 NNCCGCTCACAATTTGTATACGACTCATATAGGCGGCCGCGNATTCANATCTGGTACCAT
 GGNAATCCCCATTGGATCCCTCGAAACTAACAACTTCCGTGCTTTACTCCGGAGTCAC
 TGGTGGAGATAGAGAAGCAAATTGCTGCCAAGCAGGGAACAAAGAAAGCCAGAGAGAAGC
 ATAGGGAGCAGAAGGACCAAGAAGAGAAGCCTCGGCCCCAGCTGGACTTGAAAGCCTGCA
 ACCAGCTGCCAAGTTCTATGGTGAGCTCCCAGCAGAAGTATCGGGGAGCCCCTGGAGG
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 TTTCCCGTTTAGTGCCACTCGGGCCCTGTGGCTATTCAGTCCTTTCAACCTGATCAGAA
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 TGGTAAATTGTGTGTGCATGACCCGAACTGACCTTCCAGAGAAAATTGAATATGTCTTCA
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 ACTCAGTGAAGAACTGGCTGATGTGACCATCCTCACCATCTTCTGCCTAAGTGTTTTTG
 CCTTGGTGGGGCTGCAACTCTTCAAGGGCAACCTCAAAAATAATGTGTCAC

3' Read Nucleotide Sequence:	>OriGene 3' genomic read for NM_006514 unedited AGNANAGCACTGGGGNAGGGTCACAGGGATGCCACCTTTGTTCTGTTTCAGGAAACAGCTA TGACCCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTACATTTAAAAA TATTAATTTAATGGATATCTCAAAGGCTTTTCATGACATAGGCCACAGGTGTTACCCTG GGTCAGAGCATTGTCCGACAGCTCTCACATGCAGTCATGCAAAATCCTAAATAATTTTT CCAATCTCTGTATGGTGTCCACAGAGGACTACCTTGGACCTTCAGTAATGTTCTTGTTTC TATATCTTTGGAAGTTCTGGTCTGAGAAGTTTGTCTCAGTAAATAATCTGATTACAA CAAAAATAAAAGGACAAGGGATATTTTCTGGAGAGTAAGAGAACCATGATCTGATATTG AAATTCAGAAGGGAAATCACAGTGAAGTGCTCTTAGCTTCTGACTCCTATTTGTGTATG ATGTTTTTTTCAAAGGTGGTTACCAGTTGCATTCCCTGCCAGTTCTGACATTGTGACCA GTGGCATGCATTGGTGAGGCTGTAGCTGGGTGTGATCTGCAATGGGAAAGAGTTAACACA GAGCAGAAGGACGCATCATAACTGAACATATCCAGGCTGGAGTGTCTCACTAGGGCCCA GGGCAATCAGCTCCATACTGGTGGCTTCATCTTCATTTTGTATTGAGCTAGATGTCCTC ATGTTGACTCTACTAAGGCCTTAGTGACACTCTCATAGGACGGTGGGAATGATGTG GCAAAAGCATTTTCAGATTTGTCTGGGAGTACACAATTTTCATTTGCTGTGAATGCAACAN AACCTTC
Restriction Sites:	Please inquire
ACCN:	NM_006514
Insert Size:	6400 bp
OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
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:	<ol style="list-style-type: none"> 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_006514.2 , NP_006505.2

RefSeq Size: 5874 bp

RefSeq ORF: 5871 bp

Locus ID: 6336

UniProt ID: [Q9Y5Y9](#)

Cytogenetics: 3p22.2

Protein Families: Druggable Genome, Ion Channels: Sodium, Transmembrane

Gene Summary: The protein encoded by this gene is a tetrodotoxin-resistant voltage-gated sodium channel alpha subunit. The properties of the channel formed by the encoded transmembrane protein can be altered by interaction with different beta subunits. This protein may be involved in the onset of pain associated with peripheral neuropathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2014]
Transcript Variant: This variant (1) encodes the longest 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.