

Product datasheet for **RC230738**

Nav1.6 (SCN8A) (NM_001177984) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nav1.6 (SCN8A) (NM_001177984) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nav1.6
Synonyms:	BFIS5; CERIII; CIAT; DEE13; EIEE13; MED; MYOCL2; NaCh6; Nav1.6; PN4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC230738 representing NM_001177984 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

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AGACGTAACAGGAGAAAGAAGAGGAAGCAAAAGGAACTCTCTGAAGGAGAGGAGAAAGGGGATCCCGAGA
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Protein Sequence:

>RC230738 representing NM_001177984
 Red=Cloning site Green=Tags(s)

MAARLLAPPGPDSFKPFTPELANIERRIAESKLLKPPKADGSHREDDSDSKPKNSDLEAGKSLPFIYG
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 TILTNCVFMFTSNPPDWSKNVEYFTFTGIYTFESLVKIIARGFCIDGFTFLRDPWNWLDVSVIMMAYITEF
 VNLGNVSALRTRFRVLRALKTISVIPGLKTIVGALIQSVKLLSDVMILTVFCLSVFALIGLQLFMGNLRNK
 CVVWPIFNESYLENGTKGFDWEEYINNKTNFYTPGMLEPLLGNSSDAGQCPEGYQCMKAGRNPNYGY
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 IYFVIFIIIFGSFFTLNLFIGVIIDNFNQKKKFGGQDIFMTEEQKYYNAMKKGSKKPKQPIPRPLNKI
 QGIVDFVYQAFDIVIMMLI CLNMVTMMVETDTQSKQMENILYWINLVFVIFFTCECVLKMFA LRHYFF
 TIGWNIFDFVVVILSIVGMFLADIIEKYFVSPTLFRVIRLARIGRILRLIKGAKGIRTLFALMMSLPAL
 FNIIGLLFLVMFIFSIFGMSNFAYVKHEAGIDDMFNFTFGNSMICLFQITTSAGWDGLLLPILNRPPDC
 SLDKEHPGSGFKGDCGNPSVGIFFVSYIIISFLIVVNMYYAIILENFSVATEESADPLSEDDFETFYEI
 WEKFDPDATQFIEYCKLADFADALEHPLRVKPNTEIELIAMDLPVSGDRIHCLDILFAFTKRVLGDGSE
 LDILRQQMEERFVASNPSKVSYPEITTTLRKQEEVSAVVLQRAYRGHLARRGFICKKTTSNKLENGGTH
 REKKESTPSTASLPSYDSVTKPEKEKQRAEEGRERAKRQKEVRESKC

TRTRPLEQKLISEEDLAANDILDYKDDDDKIV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001177984

ORF Size: 5817 bp

OTI Disclaimer: 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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001177984.2](#)

RefSeq ORF: 5820 bp

Locus ID: 6334

UniProt ID: [Q9UQD0](#)

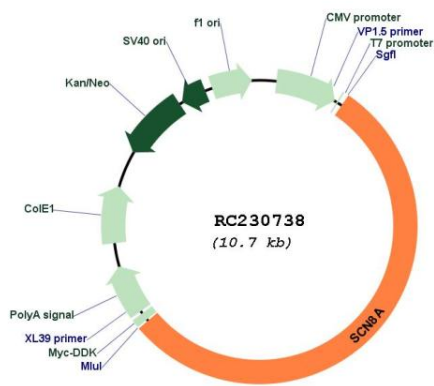
Cytogenetics: 12q13.13

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

MW: 221.2 kDa

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]

Product images:



Circular map for RC230738