

Product datasheet for **RC223887**

Nav1.6 (SCN8A) (NM_014191) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nav1.6 (SCN8A) (NM_014191) 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-AC-Myc-DDK (PS100007)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RC223887 representing NM_014191 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RC223887 representing NM_014191
 Red=Cloning site Green=Tags(s)

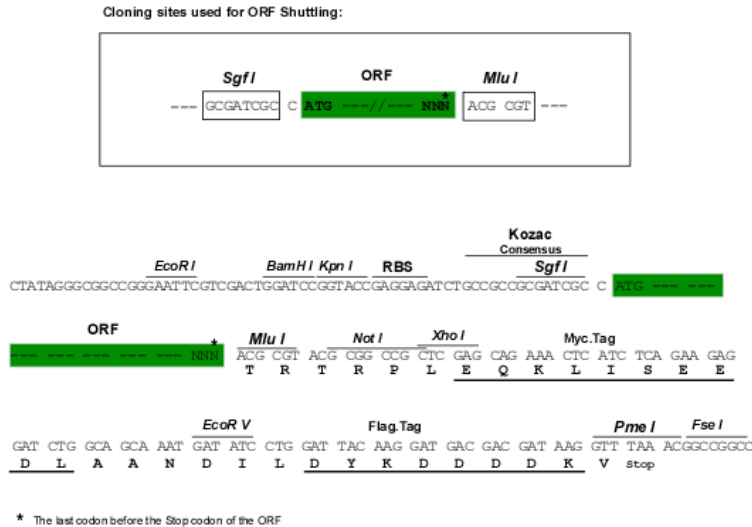
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 AEEGRERAKRQKEVRESKC

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_014191

ORF Size: 5940 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: 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:	<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_014191.4
RefSeq Size:	7008 bp
RefSeq ORF:	5943 bp
Locus ID:	6334
UniProt ID:	Q9UQD0
Cytogenetics:	12q13.13
Protein Families:	Druggable Genome, Ion Channels: Sodium, Transmembrane
MW:	225.1 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]