

Product datasheet for **RG224884**

Nav1.7 (SCN9A) (NM_002977) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nav1.7 (SCN9A) (NM_002977) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nav1.7
Synonyms:	ETHA; FEB3B; GEFSP7; HSNAN2D; Nav1.7; NE-NA; NENA; PN1; SFNP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG224884 representing NM_002977 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG224884 representing NM_002977
 Red=Cloning site Green=Tags(s)

MAMLPPPGPQSFVHFTKQSLALIEQRIERKSKEPKKEKKDDDEEAPKPSDLEAGKQLPFYIGDIPPGM
 VSEPLELDPPYYADKKTIFVLNKGKTI FRFNATPALYMLSPFSPLRRISIKILVHSLF SMLIMCTILTNC
 IFMTMNNPPDWTKNVEYFTGIYTFESLVKILARGFCVGEFTFLRDPWNWLD FVVIVFAYL TEFVNLGNV
 SALRTRFVRLRALKTISVIPGLKTI VGALIQSVKILSDVMILTVFCLSVFALIGLQLFMGNLKHKCFRNSL
 ENNETLESIMNTLESEEDFRKYFYLEGSKDALLCGFSTDSGQCEGYTCVKIGRNPDYGYTSFDTFSWA
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 LNMLIKIIIGNSV GALGNLTLVLAIVFIFAVVGMQLFGKSYKECVCKINDDCTLRWHMNDFFHSFLIVF
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 MYAAVDSVNVDKQPKYEYSLYMYIYFVVFIIFGSFFTLNLFIGVIIDNFNQKKLGGQDIFMTEEKQKY
 YNAMKKGSKKPKPIPRPGNKIQGCFDLVTNQAFDISIMVLI CLNMVTMMVEKEGQS QHMTEVLVWIN
 VVFIIILFTGECVLKLI SLRHYYFTVGNIFDFVVIISIVGMFLADLIETYFVSPTLFRVIRLARIGRIL
 RLVKGA GIRTLLFALMMSLPALFNIGLLLFLVMFIYAIFGMSNFAYVKKEDGINDMFNFETFGNSMICL
 FQITTSAGWDGLLAPILNSKPPDCPKK VHPGSSVEGDCGNPSVGIYFVYSYIIISFLVVVNMVIAVILE
 NFSVATEESTEPLSEDDFEMFYEVWEKFDPDATQFIEFSKLSDFAAALDPPLLI AKPNKVQLIAMDLP MV
 SGDRIHCLDILFAFTKRVLGESGEMDSLRSQMEERFMSANPSKVS YEPITTTLKRKQEDVSATVIQRAYR
 RYRLRQNVKNISSIYIKDGRDDDLLNKKDMAFDNVNENSPEKTDATSS TTPPSYDSVTKPKDEKYEQ
 DRTEKEDK GKDSKESK

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_002977

ORF Size: 5931 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:

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_002977.3](#)

RefSeq Size: 6371 bp

RefSeq ORF: 5934 bp

Locus ID: 6335

UniProt ID: [Q15858](#)

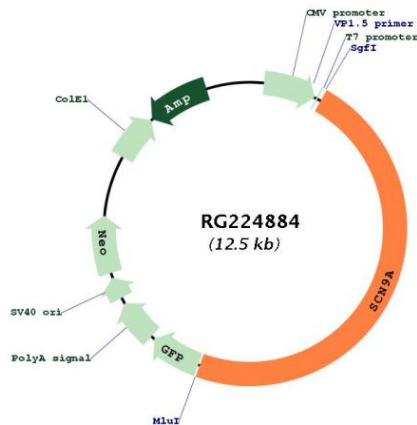
Cytogenetics: 2q24.3

Domains: IQ, ion_trans

Protein Families: Druggable Genome, Ion Channels: Sodium

Gene Summary: This gene encodes a voltage-gated sodium channel which plays a significant role in nociception signaling. Mutations in this gene have been associated with primary erythromalgia, channelopathy-associated insensitivity to pain, and paroxysmal extreme pain disorder. [provided by RefSeq, Aug 2009]

Product images:



Circular map for RG224884