

Product datasheet for RC214825

Neuron navigator 1 (NAV1) (NM_020443) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neuron navigator 1 (NAV1) (NM_020443) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Neuron navigator 1
Synonyms:	POMFIL3; STEERIN1; UNC53H1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214825 representing NM_020443 Red=Cloning site Blue=ORF Green=Tags(s)

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CTGAAGATGGAACCTGGGACTTCTAAGTGGCGGAGGGAGCGGCCTGAGAGCTGTGATGATTCATCCAAGG
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Protein Sequence:

>RC214825 representing NM_020443
 Red=Cloning site Green=Tags(s)

MLGSSVKSQPEVELSSGGGDEGADEPRGAGRKAAAADGRGMLPKRAKAPGGGGMAKASAAELKVFKSG
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 YISL LK HRRLLVSGPSGTGKTYL TNRLAEYLVERSGREVTEGIVSTFNMHQQSCKDLQLYLSNLANQID
 RETGIGD VPLVILLDDLSEAGSISELVNGAL TCKYHKCPYIIGTTNQPVKMTPNHGLHLSFRMLTF SNNV
 EPANGFLVRYLRRLVESDSDINANKEELLRVL DWVPKLWYHLHTFLEKHSTSDFLIGPCFFL SCPIGIE
 DFRTWFIDLWNNSIIPYLQEGAKDGIKVHGQKA AWEDPV EWRDTPWPSAQDQSKLYHLPPPTVGP HS
 IASPPEDRTVKDSTPSSLDSDPLMAMLLKLQEAANYIESPDRETI LDPNLQATL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8030_c07.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_020443

ORF Size: 5622 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.

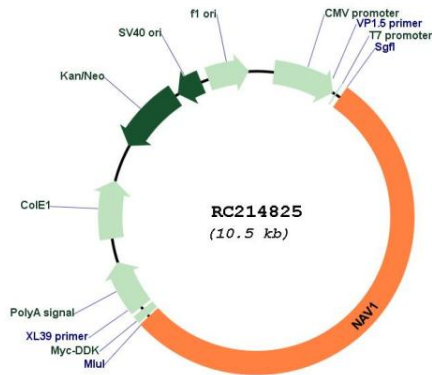
RefSeq: [NM_020443.2](#), [NP_065176.2](#)

RefSeq Size: 11365 bp

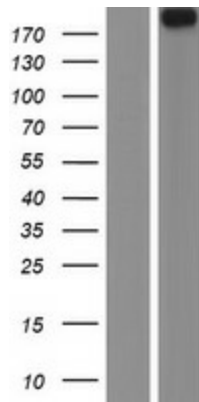
RefSeq ORF: 5634 bp
 Locus ID: 89796
 UniProt ID: [Q8NEY1](#)
 Cytogenetics: 1q32.1
 Domains: AAA
 MW: 202.3 kDa

Gene Summary: This gene belongs to the neuron navigator family and is expressed predominantly in the nervous system. The encoded protein contains coiled-coil domains and a conserved AAA domain characteristic for ATPases associated with a variety of cellular activities. This gene is similar to *unc-53*, a *Caenorhabditis elegans* gene involved in axon guidance. The exact function of this gene is not known, but it is thought to play a role in neuronal development and regeneration. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2009]

Product images:



Circular map for RC214825



Western blot validation of overexpression lysate (Cat# [LY412451]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214825 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).