

Product datasheet for RC214432

SCN7A (NM_002976) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SCN7A (NM_002976) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SCN7A
Synonyms:	NaG; Nav2.1; Nav2.2; SCN6A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214432 representing NM_002976 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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Protein Sequence:

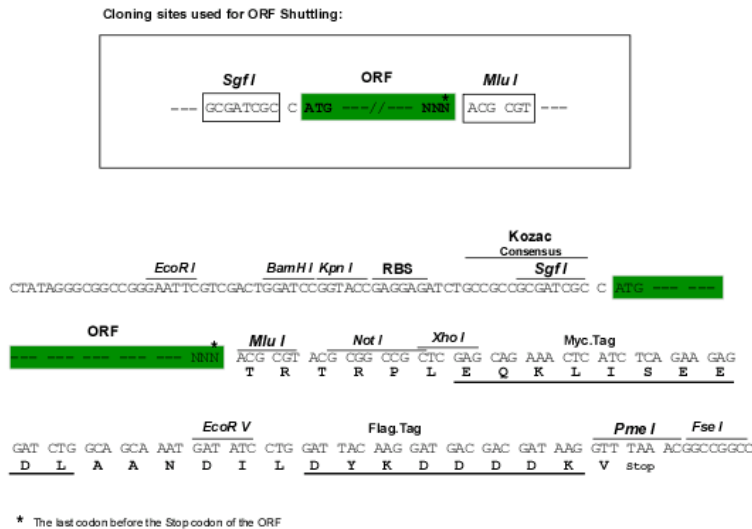
>RC214432 representing NM_002976
Red=Cloning site Green=Tags(s)

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PYYYKKKNTFIVLNKNRTIFRFNAASILCTLSPFNCIRRTTIKVLVHPFFQLFILISVLIDCVFMSLTNL
PKWRPVENTLLGIYTFEILVKLFARGVWAGSFSFLGDPWNWLDVSVTVFEVIRYSPLDFIPTLQTART
LRILKIIPLNQGLKSLVGLIHCLKQLIGVILTLFSLIFSLIGMGLFMGNLKHKCFRWPQENENETLH
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AQDYPEVLYHQILYASGVYMIFFVVVSLFVYMASLFLGILAMAYEEEEKQRVGEISKIIEPKFQQTGK
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QI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_002976

ORF Size: 5046 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).

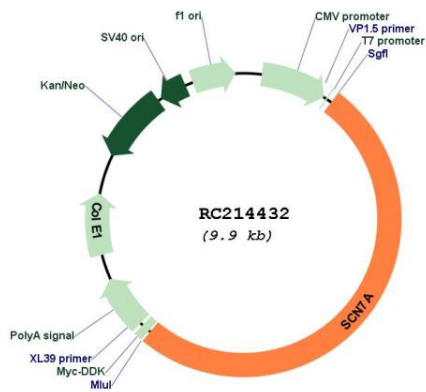
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_002976.4](#)

RefSeq Size: 7186 bp
RefSeq ORF: 5049 bp
Locus ID: 6332
UniProt ID: [Q01118](#)
Cytogenetics: 2q24.3
Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane
MW: 193.5 kDa

Gene Summary: This gene encodes one of the many voltage-gated sodium channel proteins. For proper functioning of neurons and muscles during action potentials, voltage-gated sodium channels direct sodium ion diffusion for membrane depolarization. This sodium channel protein has some atypical characteristics; the similarity between the human and mouse proteins is lower compared to other orthologous sodium channel pairs. Also, the S4 segments, which sense voltage changes, have fewer positive charged residues that in other sodium channels; domain 4 has fewer arginine and lysine residues compared to other sodium channel proteins. Several alternatively spliced transcript variants exist, but the full-length natures of all of them remain unknown. [provided by RefSeq, Dec 2011]

Product images:



Circular map for RC214432