

Product datasheet for **RG218290**

SCN4A (NM_000334) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SCN4A (NM_000334) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SCN4A
Synonyms:	CMS16; HOKPP2; HYKPP; HYPP; Na(V)1.4; NAC1A; Nav1.4; SkM1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218290 representing NM_000334 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAGACCATCTCTGTGCACCCTGGCTCGTCTGGGCCCTGAGTGCTTGCGCCCTTACCCGGGAGT
CACTGGCAGCCATAGAACAGCGGGCGGTGGAGGAGGAGGCCCGGCTGCAGCGGAATAAGCAGATGGAGAT
TGAGGAGCCCGAACGGAAGCCACGAAGTGACTTGGAGGCTGGCAAGAACCTACCCATGATCTACGGAGAC
CCCCCGCGGAGGTCATCGGCATCCCCCTGGAGGACCTGGATCCCTACTACAGCAATAAGAAGACCTTCA
TCGTACTCAACAAGGGCAAGGCCATCTCCGCTTCTCCGCCACACCTGCTCTACTCTGCTGAGCCCTT
CAGCGTAGTCAGGCGCGGGCCATCAAGGTGCTCATCCATGCGCTGTTACGATGTTTCATCATGATCACC
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CTGGAAGGTGGGGAGGCAGATGGGGACCCAGCCCATGGCAAAGACTGCAATGGCAGCCTGGACACATCGC
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 TCCTACATGTACCGCCACAGCCACGACGGCAGCGGGATGACGCCCTGAGAAGGAGGGGCTGCTTGCCA
 ACACCATGAGCAAGATGTATGGCCACGAGAATGGGAACAGCAGCTCGCCAAGCCCGGAGGAGAAGGGCGA
 GGCAGGGGACGCCGACCCTACTGCGGGCTGATGCCCCATAGCCCCTCAGACACTGCCTGGCCTCCCGCC
 CCTCCCCAGGGCAGACTGTGCGCCAGGTGTCAAGGAGTCTCTTGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG218290 representing NM_000334
 Red=Cloning site Green=Tags(s)

MARPSLCTLARLGPCELRPFTRRESLAAIEQRAVEEEARLQRNKQMEIEEPERKPRSDLEAGKNLPMIYGD
 PPPEVIGIPILEDLPYYSNKKTFIVLNKGKAIKIFRFSATPALYLLSPFSVRRGAIKVLIALFISMFIMIT
 ILTNCVFMMSDPPPWSKNVEYFTGIYTFESLIKILARGFCVDDFTFLRDPWNWLDVSVIMMAYLTFV
 DLGNISALRTRFRVLRALKTITVPLKTIKIVGALIQSVKKLSDVMILTVFCLSVFALVGLQLFMGNLRQKC
 VRWPPFNDTNTWYSNDTWYGNDTWYGNEMWYGNDSWYANDTWNASHASWATNDTFDWDAYISDEGNFYF
 LEGSNDALLCGNSSDAGHCPKGYECIKTGRNPNYGYTSYDTFSWAFLALFRLMTQDYWENLQTLRAAG
 KTYMIFVVIIFLGSFYLINLILAVVAMAYAEQNEATLAEDKEKEEEFQQLMEKFKKHQEELEKAKAAQA
 LEGGEADGPAHGKDCNGSLDTSQGEKGAAPRQSGSGDSGISDAMEELEEAHQKCPPWYKCAHKVLIWDC
 CAPWLKFKNIHILVMDPFVDLITICIVLNTLFMAMEHYPMTEHFDNVLTVGNLVFTGIFTAEMVLKLI
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 GNLTLVLAIIIVFIFAVVGMQLFGKSYKECVCKIALDCNLPRWHMHDFHFSFLIVFRILCGEWIETMWD
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 AEENPEGEQPEECFTEACVQRWPCLYVDISQGRGKWWTLRRACFKIVEHNWFETVIFMILLSGALAF
 EDIYIEQRRVIRTILEYADKVFTYIFIMEMLLKVVAYGFKVYFTNAWCWLDLIVDVSIIISLVANWLGYS
 ELGPIKSLRTRLRALRPLRALSFRFEGMRVVNALLGAIPSIMNVLVCLIFWLIFSIMGVNLFAGKFYYCI
 NTTTTSERFDISEVNNKSECELSMHTGQVRWLVNKNVNYDNVGLGYLSLLQVATFKGWMDIMYAAVDSREK
 EQPQYEVNLYMYLYFVIFIFIGSFFTLNLFIVGVIDNFNQKQKGLGKDIKFMTEEQKYYNAMKGLGSKK
 PQKPIPRPQNKIQGMVYDLVTKQAFDITIMILICLNMVTMMVETDDQSQLKVDILYNINMIFIIIFTGEC
 VLKMLALRQYYFTVGNVIFDFVIVVILSIVGLALSDLIQKYFVSPTLFRVIRLARIGRVLRLIRGAKGIRT
 LLFALMMSLPALFNIIGLLLFLVMFIYSIFGMSNFAYVKKESGIDDMFNFTFGNSIICLFEITTSAGWDG
 LLNPILNSGPPDCPNLENPGTSVKGDCGNPSIGICFFCSYIIISFLIVNMYIAIILENFVATEESSE
 PLGEDDFEMFYETWEKFDPDATQFIAYSRLSDFVDTLQEPLRIAKPNKIKLITLDLPMVPGDKIHCLDIL
 FALTKEVLGDSGEMDALKQTMEEKFMAANPSKVSYPEITTTLKRKHVEVCAIKIQRAYRRHLLQRSMKQA
 SYMYRHSHDGSGDDAPEKEGLLANTMSKMYGHENGNSSSPSPEEKGEAGDAGPTMGLMPISPSDTAWPPA
 PPPGQTVRPGVKESLV

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:


ACCN: NM_000334

ORF Size: 5508 bp

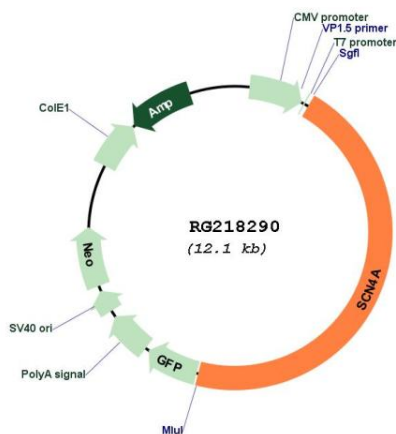
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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_000334.3 , NP_000325.3
RefSeq Size:	7823 bp
RefSeq ORF:	5511 bp
Locus ID:	6329
UniProt ID:	P35499
Cytogenetics:	17q23.3
Protein Families:	Druggable Genome, Ion Channels: Sodium, Transmembrane
Gene Summary:	Voltage-gated sodium channels are transmembrane glycoprotein complexes composed of a large alpha subunit with 24 transmembrane domains and one or more regulatory beta subunits. They are responsible for the generation and propagation of action potentials in neurons and muscle. This gene encodes one member of the sodium channel alpha subunit gene family. It is expressed in skeletal muscle, and mutations in this gene have been linked to several myotonia and periodic paralysis disorders. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG218290