

Product datasheet for RC215453

SCN3A (NM_006922) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SCN3A (NM_006922) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SCN3A
Synonyms:	DEE62; EIEE62; FFEVF4; NAC3; Nav1.3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-Myc-DDK (PS100007)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RC215453 representing NM_006922 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCACAGGCACTGTTGGTACCCAGGACCTGAAAGCTTCGCCTTTTACTAGAGAATCTCTTGCTG
CTATCGAAAAACGTGCTGCAGAAGAGAAAGCCAAAGCCAAAAAGGAACAAGATAATGATGATGAGAA
CAAACCAAGCCAAATAGTGACTTGAAGCTGGAAGAACCTTCCATTTATTTATGGAGACATTCCTCCA
GAGATGGTGTGAGAGCCCTGGAGGACCTGGATCCCTACTATATCAATAAGAAAACCTTTATAGTAATGA
ATAAAGGAAAGGCAATTTCCGATTCAGTGCCACCTCTGCCTGTATATTTAACTCCACTAAACCTGT
TAGGAAAATTGCTATCAAGATTTTGGTACATTCCTTATTCAGCATGCTTATCATGTGCACATTTTGACC
AACTGTGTATTTATGACCTTGAGCAACCTCCTGACTGGACAAAGAATGTAGAGTACACATTCACCTGGAA
TCTATACCTTTGAGTCACTTATAAAAACTTTGGCAAGAGGGTTTTGCTTAGAAGATTTTACGTTTCTTCG
TGATCCATGGAAGCTGGCTGGATTCAGTGTCTTGTGATGGCATATGTGACAGAGTTTGTGGACCTGGGC
AATGTCTCAGCGTTGAGAACATTCAGAGTTCTCCGAGCACTGAAAACAATTTTCAGTCATTCAGGTTTAA
AGACCATTTGGGGGCCCTGATCCAGTCGGTAAAGAAGCTTTCTGATGTGATGATCTGACTGTGTTCTG
TCTGAGCGTGTTGCTCTCATTGGGCTGCAGCTGTTTATGGCAATCTGAGGAATAAATGTTTGCAGTGG
CCCCAAGCGATTCTGCTTTTGAACCAACACCCTTCTACTTTAATGGCACAATGGATTCAAATGGGA
CATTTGTTAATGTAACAATGAGCACATTTAACTGGAAGGATTACATTGGAGATGACAGTCACTTTTATGT
TTTGGATGGGCAAAAAGACCCTTTACTCTGTGGAATGGCTCAGATGCAGGCCAGTGTCCAGAAGGATAC
ATCTGTGTGAAGGCTGGTCGAAACCCCACTATGGCTACACAAGCTTTGACACCTTTAGCTGGGCTTTCC
TGTCTCTATTTGACTCATGACTCAAGACTACTGGGAAAATCTTACCAGTTGACATTACGTGCTGCTGG
GAAAACATACATGATATTTTTGCTCCTGGTCATTTTCTGGGCTCATTTTATTTGGTGAATTTGATCCTG
GCTGTGGTGGCCATGGCCTATGAGGAGCAGAATCAGGCCACCTTGAAGAAGCAGAACAAAAGAGGCCG
AATTTGAGCAGATGCTCGAACAGCTTAAAAGCAACAGGAAGAAGCTCAGGCAGTTCGGCAGCATCAGC
TGCTTCAAGATTTAGTGAATAGTGGGTTAGGAGAGCTGTTGGAAGTTCTTCAGAAGCATCAAAG



[View online »](#)

TTGAGTTCAAAAAGTGCTAAAGAATGGAGGAACCGAAGGAAGAAAAGAAGACAGAGAGACACCTTGAAG
 GAAACAACAAAGGAGAGAGAGACAGCTTCCCAAATCCGAATCTGAAGACAGCGTCAAAGAAGCAGCTT
 CCTTTTCTCCATGGATGGAAACAGACTGACCAGTGACAAAAAATCTGCTCCCCTCATCAGTCTCTCTTG
 AGTATCCGTGGCTCCCTGTTTTCCCAAGACGCAATAGCAAAACAAGCATTTTCAGTTTCAGAGGTCGGG
 CAAAGGATGTTGGATCTGAAAATGACTTTGCTGATGATGAACACAGCACATTTGAAGACAGCGAAAGCAG
 GAGAGACTCACTGTTTGTCCGCACAGACATGGAGAGCGACGCAACAGTAACGTTAGTCAGGCCAGTATG
 TCATCCAGGATGGTCCAGGGCTTCCAGCAAATGGGAAGATGCACAGCACTGTGGATTGCAATGGTGTGG
 TTTCTTGGTGGTGGACCTTCAGCTCTAACGTACCTACTGGACAACCTCCCCAGAGGGCACCACCAC
 AGAAACGGAAGTCAGAAAGAGAAGGTTAAGCTCTTACCAGATTTCAATGGAGATGCTGGAGGATTCCTCT
 GGAAGGCAAAGAGCCGTGAGCATAGCCAGCATTCTGACCAACACAATGGAAGAACTTGAAGAATCTAGAC
 AGAAATGTCGCCATGCTGGTATAGATTGGCAATGTGTTCTTGATCTGGGACTGCTGTGATGCATGGTT
 AAAAGTAAACATCTTGTGAATTAATTGTTATGGATCCATTTGTTGATCTTGCCATCACTATTTGCATT
 GTCTTAAATACCCTCTTATGGCCATGGAGCACTACCCCATGACTGAGCAATTCAGTAGTGTGTTGACTG
 TAGGAAACCTGGTCTTACTGGGATTTTACAGCAGAAAATGGTTCTCAAGATCATTGCCATGGATCCTTA
 TACTATTTCCAAGAAGGCTGGAATATCTTTGATGGAATTATTGTCAGCCTCAGTTTAAATGGAGCTTGGT
 CTGTCAAATGTGGAGGGATTGTCTGTACTGCGATCATTAGACTGCTTAGAGTTTCAAGTTGGCAAAT
 CCTGGCCACACTAAATATGCTAATTAAGATCATTGGCAATTCTGTGGGGCTCTAGGAAACCTCACCTT
 GGTGTTGGCCATCATCGTCTTATTTTTGCTGTGGTCGGCATGCAGCTCTTTGGTAAGAGCTACAAAGAA
 TGTGTCTGCAAGATCAATGATGACTGTACGCTCCCACGGTGGCACATGAACGACTTCTTCCACTCCTTCC
 TGATTGTGTTCCGCGTGTGTGGAGAGTGGATAGAGACCATGTGGGACTGTATGGAGGTCGCTGGCCA
 AACCATGTGCCTATTGTTTTATGTTGGTTCATGGTTCATGGTTCATTGGAACCTTGTGGTCTGAACCTCTTCTG
 GCCTATTGTTGAGTTCATTTAGCTCAGACAACCTTGTGCTACTGATGATGACAATGAAATGAATAATC
 TGCAGATTGCAGTAGGAAGAATGCAAAAGGGAATTGATTATGTGAAAAATAGATGCGGGGATGTTTCCA
 AAAAGCCTTTTTAGAAAAGCCTAAAGTTATAGAAATCCATGAAGCAATTAAGATAGACAGCTGCATGCTCC
 AATAACTGGAATTGAAATAAGCAAAGAGCTTAATTATCTTAGAGATGGGAATGGAACCCAGTGGTG
 TAGGTAAGCAGTGTGAAAAATACGTAATCGATGAAAAATGATTATATGTCATTCATAAAACAACCC
 CAGCCTCACCGTCACAGTGCCAATTGCTGTTGGAGAGTCTGACTTTGAAAACCTAAATACTGAAGAGTTC
 AGCAGTGAGTCAGAACTAGAAGAAAGCAAAGAGAAATTAATGCAACCAGCTCATCTGAAGGAAGCACAG
 TTGATGTTGTTCTACCCGAGAAGGTGAACAAGCTGAAACTGAACCCGAAGAAGACCTTAAACCCGAAGC
 TTGTTTTACTGAAGGATGTATTAATAAGTTTCCATTCTGTCAAGTAAGTACAGAAGAAGGCAAAGGGAAG
 ATCTGGTGAATCTTCGAAAACCTGCTACAGTATTGTTGAGCACAACCTGTTTGTGACTTTCATTGTGT
 TCATGATCCTTCTCAGTAGTGGTGCATTGGCCTTTGAAGATATATACATTGAACAGCGAAAGACTATCAA
 AACCATGCTAGAATATGCTGACAAAGTCTTACCTATATATTCATTCTGGAAATGCTTCTCAAATGGGT
 GCTTATGGATTTCAAACATATTTCACTAATGCCTGGTGTGGCTAGATTTCTTGATCGTTGATGTTTCTT
 TGGTTAGCCTGGTAGCCAATGCTCTTGGCTACTCAGAACCTCGGTGCCATCAAATCATTACGGACATTAAG
 AGCTTTAAGACCTCTAAGAGCCTTATCCCGTTTGAAGGCATGAGGGTGGTTGTGAATGCTCTTGTGGGA
 GCAATTCCTCTATCATGAATGTGCTGTTGGTCTGTCTCATCTTCTGGTTGATCTTTAGCATCATGGGTG
 TGAATTTGTTTGGTGGCAAGTTCTACCACTGTGTTAACATGACAACGGGTAAACATGTTTGACATTAGTGA
 TGTTAACAAATTTGAGTGACTGTCAAGCTTTGGCAAGCAAGCTCGGTGGAAAAACGTGAAAGTAACTTT
 GATAATGTTGGCGCTGGCTATCTTGCACTGCTTCAAGTGGCCACATTTAAAGGCTGGATGGATATTATGT
 ATGCACTGTTGATTACAGAGATGTTAAACTTCAGCCTGTATATGAAGAAAATCTGTACATGATTTTATA
 CTTTGTGATCTTTATCATCTTGGGTGCTTCTTCACTCTGAATCTATTCTTGGTGTGATCATAGATAAC
 TTCAACCAGCAGAAAAAGGTTTGGAGGTCAAGACATCTTTATGACAGAGGAACAGAAAAAATATTACA
 ATGCAATGAAGAACTGGATCCAAGAAACCTCAGAAACCCATACCTCGCCAGCAAACAATTTCAAGG
 AATGGTCTTTGATTTTGAACCAGACAAGTCTTTGATATCAGCATCATGATCCTCATCTGCTCAACATG
 GTCACCATGATGGTGGAAACGGATGACCAGGGCAAATACATGACCCTAGTTTTGTCCGGATCAACCTAG
 TGTTTATTGTTCTGTTCACTGGAGAATTTGTGCTGAAGCTCGTCTCCCTCAGACACTACTACTTCACTAT
 AGGCTGGAACATCTTGACTTTGTGGTGGTGAATCTCTCCATTGTAGGTATGTTTCTGGCTGAGATGATA
 GAAAAGTATTTGTGTCCTTACCTTGTCCGAGTGATCCGTCTTGCAGGATTGGCCGAATCCTACGTC
 TGATCAAAGGAGCAAAGGGGATCCGCACGCTGCTTTGCTTTGATGATGTCCTTCTGCTGCTGTTTAA
 CATCGGCTCCTGCTCTTCTGGTCAATGTTTATCTATGCCATCTTTGGGATGTCAAACCTTTGCTATGTT
 AAAAAGGAAGCTGGAATTGATGACATGTTCAACTTTGAGACCTTTGGCAACAGCATGATCTGCTTGTTC

AAATTACAACCTCTGCTGGCTGGGATGGATTGCTAGCACCTATTCTTAATAGTGCACCACCCGACTGTGA
 CCCTGACACAATTCACCCTGGCAGCTCAGTTAAGGGAGACTGTGGGAACCCATCTGTTGGGATTTTCTTT
 TTTGTCAGTTACATCATCATATCCTTCTGTTGTGGTGAACATGTACATCGCGGTACCTCGGAGAACT
 TCAGTGTGCTACTGAAGAAAGTGCAGAGCCCTGAGTGGAGTACTTTGAGATGTTCTATGAGTTTG
 GGAAAAGTTTGATCCCGATGCGACCCAGTTTATAGAGTTCTCTAAACTCTGATTTTGCAGCTGCCCTG
 GATCCTCCTCTTCTCATAGCAAAAACCAAAAGTCCAGCTTATTGCCATGGATGCCCCATGGTCAGTG
 GTGACCGGATCCACTGTCTTGTATTTTATTTGCCTTTACAAAGCGTGTTTGGGTGAGAGTGGAGAGAT
 GGATGCCCTTCGAATACAGATGGAAGACAGGTTTATGGCATCAAACCCCTCCAAAGTCTCTTATGAGCCT
 ATTACAACCACCTTTGAAACGTAAACAAGAGGAGGTGTCTGCCGCTATCATTACAGCGTAATTTGAGATGTT
 ATCTTTTAAAGCAAAGGTTAAAAATATATCAAGTAACTATAACAAAGAGGCAATTAAGGGAGGATTGA
 CTTACCTATAAAACAAGACATGATTATTGACAACTAAATGGAACTCCACTCCAGAAAAACAGATGGG
 AGTTCTCTACCACCTCTCCTCTTCTATGATAGTGTAAACAAACCAGACAAGGAAAAGTTTGAGAAAG
 ACAACCAGAAAAAGAAAGCAAAGGAAAAGAGGTCAGAGAAAATCAAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC215453 representing NM_006922
 Red=Cloning site Green=Tags(s)

MAQALLVPPGPESFRLFTRESLAAIEKRAAEKAKKPKKEQDNDNENKPKPNSDLEAGKNLFFIYGDIPP
 EMVSEPLEDLDPYYINKKTFIVMNGKKAIFRFSATSALYILTPLNPVRKIAIKILVHSLFSLMIMCTILT
 NCVFMTLSNPPDWTKNVEYFTGIYTFESLIKILARGFCLEDFTLRDPWNWLDVSVIVMAYVTEFVDLG
 NVSALRTRFVLRALKTISVIPGLKTIIVGALIQSVKCLSDVMILTVFCLSVFALIGLQLFMGNLRNKCLQW
 PPSDSAFETNTTSYFNGTMDNNGTFVNVMTSTFNWKDYIGDSSHVYVLDGQKDPDLLCGNGSDAGQCPEGY
 ICVKAGRPNPYGYTSDFTSWAFLSLFRMLTQDYWENLYQLTLRAAGKTYMIFVFLVIFLGSFYLVNLIL
 AVVAMAYEEQNQATLEEAQEKEAEFQMLEQLKKQEEAQAVAAAASAARDVSGIGGLGELLESSSEASK
 LSSKSAKEWRNRKRRRQREHLEGNNGGERDSFPKSESEDSVKRSSFLSMDGNRLTSDKKFCSPHQSL
 SIRGSLFSPRRNSKTSIFSRFRGAKDVGSENFADDEHSTFEDSESRRLSFLVPHRHGERRNSNVSQASM
 SSRMVPGLPANGKMHSTVDCNGVSVLVGGPSALTSPGTQLPPEGTTTETEVRKRRLSSYQISMEDLSS
 GRQRAVSIASILTNTMEELEESRQKCPPCWYRFANVFLIWDCCDAWLKVKHLVNLIVMDPFVLAITICI
 VLNTLFMAMEHYPMTEQFSSVLTVGNLVFTGIFTAEMVLKIIAMPDYFYFQEGWNIFDGIIVSLMELG
 LSNVEGLSVLRSFRLRVRFLAKSWPTLNMLIKIIGNSVGALGNLTLVLAIIVFIIVAVVMQLFGKSYKE
 CVCKINDDCTLRWHMNDFFHSFLIVFRVLGGEWIEIEMWDCMEVAGQTMCLIVFMLVMVIGNLVVNLFL
 ALLLSFSSDNLAAATDDDNEMNQLIAGVGMQKIDYVKNMRECFQKAFRKPVKVIEIHEGNKIDSCMS
 NNTGIEISKELNYLRDNGTTSVGTGSSVEKYVIDENDYMSFINNPSLTVTVPVIAVGESDFENLNTEEF
 SSESELESKEKLNATSSSEGSTVDVLPREGEQAETEPEEDLKPEACFTEGCIKKFPFCQVSTEEGKKG
 IWWNLRKTCYSIVEHNWFETTFIVMILLSSGALAFEDIYIEQRKTIKTMLEYADKVFTYIFILEMLLKWV
 AYGFTYFTNAWCWLDLFLIVDVSLSLVANALGYSELGAIKSLRTRLRALRPLRALSRFEGMRVVVNLVVG
 AIPSIMNVLLVCLIFWLIFSIMGVNLFAGKFYHCYNMTTGNMFDISDVNNLSDCQALGKQARWKNVKNF
 DNVGAGYLALLQVATFKGWMDIMYAAVDSRDVQLQPVYEEENLYMYLYFVIFIIFGSFFTLNLFIGVIIDN
 FNQKKKFGGQDIFMTEEQKKYNNAMKLLGSKPKQPIPRPANKFQGMVDFVTRQVFDISIMILICLNM
 VTMMVETDDQGYMTLVLSRINLVFIVLFTGEFVLLVSLRHYYFTIGWNIFDFVVVILSIVGMFLAEMI
 EKYFVSPTLFRVIRLARIGRILRLIKGAKGIRTLFALMMSLPALFNIGLLLFLVMFIYAFGMSNFAYV
 KKEAGIDDMFNFTFGNSMICLFQITTSAGWDGLLAPILNSAPPDCDPDIHPGSSVKGDCGNPSVGIFF
 FVSYYIIISFLVVVNMVIAVILENF SVATEESAEPLEDDFEMFYEVWEKFDPDATQFIEFSKLSDFAAAL
 DPPLLIAPKNKVLIAMDLPMVSGDRIHCLDILFAFTKRVLGESGEMDALRIQMEDRFMASNPSKVSYPE
 ITTTLKRKQEEVSAIIQRNFRCYLLKQRLKNISSNYNKEAIKGRIDLPIKQDMIIDKLNSTPEKTDG
 SSSSTSPPSYDSVTKPDKEKFEKDKPEKESKGEVRENQK

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_006922

ORF Size: 6000 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_006922.4
RefSeq Size:	9123 bp
RefSeq ORF:	6003 bp
Locus ID:	6328
UniProt ID:	Q9NY46
Cytogenetics:	2q24.3
Domains:	IQ, ion_trans
Protein Families:	Druggable Genome, Ion Channels: Sodium, Transmembrane
MW:	226.1 kDa
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, and is found in a cluster of five alpha subunit genes on chromosome 2. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]