

## Product datasheet for **RG212211**

### SCN3A (NM\_001081676) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SCN3A (NM_001081676) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SCN3A
Synonyms:	DEE62; EIEE62; FFEVF4; NAC3; Nav1.3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG212211 representing NM_001081676 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCACAGGCACTGTTGGTACCCAGGACCTGAAAGCTTCGCCTTTTACTAGAGAATCTCTTGCTG  
CTATCGAAAAACGTGCTGCAGAAGAGAAAGCAAGAAGCCAAAAAGGAACAAGATAATGATGATGAGAA  
CAAACCAAGCCAAATAGTGACTTGAAGCTGGAAGAACCTTCCATTTATTTATGGAGACATTCCTCCA  
GAGATGGTGTGAGAGCCCTGGAGGACCTGGATCCCTACTATATCAATAAGAAAACCTTTATAGTAATGA  
ATAAAGGAAAGGCAATTTCCGATTCAGTGCCACCTCTGCCTGTATATTTAACTCCACTAAACCTGT  
TAGGAAAATTGCTATCAAGATTTTGGTACATTCCTTATTCAGCATGCTTATCATGTGCACATTTTGACC  
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AGACCATTTGTTGGGGCCCTGATCCAGTCGGTAAAGAAGCTTTCTGATGTGATGATCTGACTGTGTTCTG  
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 ATAAAAACAGACATGATTATTGACAAACTAAATGGGAACTCCACTCCAGAAAAACAGATGGGAGTTCCT  
 CTACCACCTCTCCTCTCTATGATAGTGAACAAAACAGACAAGAAAAAGTTTGAGAAAAGACAAACC  
 AGAAAAAGAAAGCAAAGGAAAAGAGGTCAGAGAAAATCAAAG

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG212211 representing NM\_001081676  
 Red=Cloning site Green=Tags(s)

MAQALLVPPGPESFRLFTRESLAAIEKRAAEKAKKPKKEQDNDENKPKNSDLEAGKNLPIYGDIPP  
 EMVSEPLELDPYYINKKTFIVMNKGKAIFFRSATSALYILTPLNPVRKIAIKILVHSLFSLMIMCTILT  
 NCVFMTLSNPPDWTKNVEYFTFTGIYTFESLIKILARGFCLEDFTLRDPWNWLDVSVIVMAYVTEFVDLG  
 NVSALRTRFVLRALKTISVIPGLKTIVGALIQSVKKLSDVMILTVFCLSVFALIGLQLFMGNLRNKCLQW  
 PPSDSAFETNTTSYFNGTMDSNFTFVNTMSTFNWKDYIGDSSHVYVLDGQKDPLLCGNGSDAGQCPEGY  
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 EVRKRRLSSYQISMEDDSSGRQRAVSIASILTNTMEELEESRQKPCPCWYRFANVFLIWDCCDAWLK  
 KHLVNLIVMDPFVDLAITICIVLNTLFMAMEHYPMTEQFSSVLTVGNLVFTGIFTAEMVLKIIAMPDYYY  
 FQEGWNIFDGIIVSLSLMELGLSNVEGLSVLRSFRLLRVFKLAKSWPTLNMLIKIIGNSVGLGNLTLVL  
 AIIVFIFAVVGMQLFGKSYKECVCKINDDCTLRWHMNDFFHSFLIVFRVLCGEWIETMWDCEVAGQTM  
 CLIVFMLVMVIGNLVVLNLFALLLSSFSSDNLAAATDDDNEMNNLQIAGGRMQKIDYVKNKMRFCQKA  
 FFRKPKVIEIHEGNKIDSCSNNTGIEISKELNYLRDNGTTSVGTGSSVEKYVIDENDYMSFINNPSL  
 TVTVPIAVGESDFENLNTTEEFSSSESELESKEKLNATSSSEGSTVDVVLPREGEQAETEPEEDLKPEACF  
 TEGCIKKFPFCQVSTEEGKGIWWNLRKTCYSIVEHNFETFIIVMILLSGALAFEDIYIEQRKTIKTM  
 LEYADKVFTYIFILEMLLKWVAYGFQTYFTNAWCWLDLIVDVSLSLVANALGYSELGAIKSLRTRLRAL  
 RPLRALSRFEGMRVVVNLVGAIPSIMNVLVCLIFWLIFSIMGVNLFAGKFYHCVNMTTGNMFDISDVN  
 NLSDCQALGKQARWKNVNFNDVNGAGYLALLQVATFKGWMDIMYAAVDSRDVKLQPVYEEENLYMYLYFV  
 IFIIFGSFRTLNLFIGVIIDNFNQKKKFGGQDIFMTEEQKKYNNAMKLGSKKPQKPIPRPANKFQGMV  
 FDFVTRQVFDISIMILICLNMVTMMVETDDQGYMTLVLSRINLVFIVLFTGEFVLKLVSLRHYYFTIGW  
 NIFDFVVVILSIVGMFLAEMIEKYFVSPTLFRVIRLARIGRILRLIKGAKGIRTLFALMMSLPALFNIG  
 LLLFLVMFIYAIFGMSNFAYVKEAGIDDMFNFTFGNSMICLFQITTSAGWDGLLAPILNSAPPDCDPD  
 TIHPGSSVKGDCGNPSVGIFFFVSYIIISFLVVVNMVIAVILENFSVATEESAEPLEDDFEMFYEVEWKE  
 FDPDATQFIEFSKLSDFAAALDPPLLIAPKNVQLIAMDLPMVSGDRIHCLDILFAFTKRVLGESGEMDA  
 LRIQMEDRFMASNPSKVSYPEITTTLKRKQEEVSAIIQRNFRCYLLKQRLKNISSNYNKEAIKGRIDL  
 IKQDMIIDKLNSTPEKTDGSSSTTSPPSYDSVTKPDKEKFEKDKPEKESKGEVRENQK

TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI



<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<p>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).</p>
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001081676.2</a>
<b>RefSeq Size:</b>	8994 bp
<b>RefSeq ORF:</b>	5856 bp
<b>Locus ID:</b>	6328
<b>UniProt ID:</b>	<a href="#">Q9NY46</a>
<b>Cytogenetics:</b>	2q24.3
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Sodium, Transmembrane
<b>Gene Summary:</b>	<p>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]</p>