

## Product datasheet for RN217715

### Scn5a (NM\_001160162) Rat Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Scn5a (NM_001160162) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Scn5a
Synonyms:	Nav1.5; SCAL
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>RN217715 representing NM_001160162 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGCAAACCTCCTGTTACCTCGGGGCACCAGCAGCTTCCGTAGGTTACCCGGGAGTCACTGGCGGCCA  
TCGAGAAGCGAATGGCTGAAAAGCAAGCCCGAGGAGGTTTCGGCCACCTCACAGGAGAGCCGTGAGGGCCT  
GCAGGAGGAGGAGGCTCCCCGGCCCCAGCTGGACCTACAGGCCTCCAAAAAGCTGCCAGATCTCTATGGC  
AACCCACCCCGAGAGCTCATCGGGGAGCCCTGGAAGACCTGGACCCTTCTATAGTACCCAGAAGACCT  
TCATCGTGCTGAATAAGGGCAAAACCATCTTCCGGTTCAGTGCCACCAATGCCTTGTATGTCCTCAGCCC  
CTTCCACCCCGTGCGCCGAGCGGCCGTGAAGATCCTGGTACACTCGCTCTTAGCATGCTCATATGTGC  
ACCATCCTGACCAACTGCGTGTTTCATGGCCAGCACGACCCTCCGCCTTGGACCAAAATAGTTGAGTACA  
CCTTCACTGCCATCTACACCTTTGAGTCTCTGGTCAAGATTCTAGCTCGAGGCTTCTGCCTGCATGCATT  
CACCTTCTTTCGGGACCCGTGGAAGTGGCTAGACTTCAGTGTGATCGTCATGGCATAACAACCTGAATTT  
GTGGACCTGGGCAATGTCTCAGCCTTACGCACCTCCGAGTCTCCGGGCCCTGAAAACCTATATCGGTCA  
TTTCAGGCCTGAAGACCATCGTGGGAGCCCTAATCCAGTCTGTGAAGAACTGGCCGATGTGATGGTCACT  
CACTGTCTTCTGCCTCAGTGTCTTTGCCCTCATTGGCCTGCAGCTTTCATGGGCAACCTGAGGCACAAG  
TGTGTGCGTAACCTCACCGAGCTCAATGGCACCAATGGTTCGGTGGAGGCCGACGGCCTAGTCTGGAAC  
CCCTGGACGTCTACCTCAATGACCCAGCCAATTACCTGCTCAAGAATGGCACCACGGATGTGTTACTATG  
TGGGAACAGCTCTGATGCCGGGACATGCCCTGAGGGCTATCGGTGCCTGAAGGCAGGTGAGAACCCAGAC  
CACGGTTACACCAGCTTCGACTCCTTCGCCTGGGCCTTCTTGCCTCTTCCGCCTGATGACACAGGACT  
GCTGGGAACGCCTATACCAGCAGACCCTGAGGTCCGAGGAAAGATCTACATGATCTTCTCATGCTCGT  
CATCTTTCTGGGCTCCTTCTACCTGGTGAACCTTGATCCTGGCTGTGGTGGCCATGGCCTACGAGGAGCAA  
AACCAAGCCACCATCGCCGAGACGGAAGAGAAGGAGAAGCGCTTCCAGGAGGCCATGGAGATGCTCAAGA  
AGGAACACGAGGCTCTACCATCAGGGGTGGATACCGTGTCCCGTAGCTCTCTGGAGATGTCTCCTTT  
GGCCCCAGTAACCAACCATGAGAGAAAAGAGCAAAAGGAGGAAACGACTATCTTACGGGACAGAGGATGGT  
GGGGATGACAGGCTCCCCAAGTCGGACTCAGAAGATGGTCCAGAGCATTGAATCAGCTCAGCCTCACCC



[View online >](#)

ATGGGCTCAGCCGGACATCCATGAGGCCCGCTCGAGCCGAGGGAGCATTTTCACGTTCCGAAGACGGGA  
 CCAAGGCTCTGAGGCGGACTTCGCAGATGACGAGAACAGCACTGCGGGGAGAGCGAGAGCCACCGCACA  
 TCGCTGCTGGTACCCTGGCCCTGCGCCATCCCAGCGCCAAGGACAGCCCGGCCCTGGAGCCTCAGCTC  
 CCGTTACGTTCTCAATGGCAAAGGAACAGCACCGTGGACTGCAATGGGTGGTTTCTTGTCTGGGGG  
 AGGTGACGCAGAGGCCACCTCCCAGGGAGCTACCTTCTCGCCCTATGGTGTGGACCGACCCCGAGAC  
 ACGACCACTCCGTGAGAGGAGCCCGTGGGCCAGATGCTGACACCTCAGGCTCCGTGTGCAGATGGTT  
 TTGAGGAGCCCGGAGCACGGCAACGGGCACTCAGCGCTGTCAGTGTCTCACCAGTCCCTGGAAGAGTT  
 GGAGGAGTCCCATCGGAAGTGTCCACCATGCTGGAACCGCTTTGCCAGCACTACCTCATCTGGGAGTGC  
 TGTCACCTCTGGATGTCCATCAAGCAGAAGGTGAAGTTTGTGGTTCATGGACCCATTTGCCGACCTACTA  
 TCACCATGTGCATCGTGTCAATACGCTTTCATGGCTCTGGAGCATTACAACATGACGGCAGAGTTTGA  
 GGAGATGCTGCAGGTGCGAAACCTGGTCTTACGGGAATCTTACAGCGGAGATGACCTTCAAGATCATC  
 GCCCTTGACCCCTACTACTACTTCCAGCAGGGCTGGAATATCTTGCAGCATCATCGTCATCCTCAGTC  
 TCATGGAGCTGGGGCTGTCCGCATGGCAACTGTCTGTGTACGTTTCTTCCGCTGTCTGCGGGTCTT  
 CAAGCTGGCCAAGTCTGGCCACCCTGAACACGCTCATCAAGATCATCGGGAACCTCGTGGGCGCCCTG  
 GGAACCTGACCCTGGTGTGGCCATCATCGTCTTTCATCTTCCGCGTGGTGGGCATGCAGCTCTTCCGCA  
 AGAACTACTCGGAGCTGAGGCACCGCATCAGCGACTCCGCGCTGTGCCCGCTGGCACATGATGGAATT  
 TTTCCACGCTTCTCATCATCTTCCGCATCCTCTGTGGGGAGTGGATCGAGACCATGTGGGACTGCATG  
 GAGGTGTCTGGGAGTGCCTGTGCTTGGTCTTCTGCTCGTCATGGTCATTGGCAACCTTGTGGTCC  
 TGAATCTCTTCTTGGCCTTGTGCTCAGCTCCTCAGCGCAGACAACCTCACAGCCCTGACGAGGATGG  
 GGAGATGAACAACCTCCAGCTGGCCCTGGCTCGCATCCAGAGGGGCTGCGCTTTGTCAAGCGGACCACC  
 TGGGACTTCTGCTGCGGGATCCTGCGGCGGCGACCTAAGAAGCCCGCGCTTGGCCACCACAGCCAGC  
 TGCCCAGCTGTATCACCGCCCCAGGTCCCACCACCCCGAGAGGTGGAGAAGGTGCCCCAGCCCGCAA  
 GGAACACGATTGAGGAGGACAAGCGACCCGGCCAGGGCACCCCTGGGATTGCGAGCTGTGTGTGTG  
 CCCATCGCCGTGGCTGAGTCAGACACTGAAGACCAGGAAGAGGATGAAGAGAACAGCCTTGGCACAGAGG  
 AAGAGTCCAGCAAACAGACCCCTGAGGACAGTTACTCCGAGGGCAGCACAGCTGACATGACCAACACCGC  
 CGACCTCCTGGAGCAAATCCCAGACCTTGGTGAGGACGTCAAGGACCCAGAGGACTGCTTTACTGAAGGC  
 TGCGTCCGACGCTGTCCCTGCTGCATGGTAGACACAACCCAGTCCCAGGGAAAGTCTGGTGGCGATTGC  
 GCAAGACCTGCTACCGCATCGTGGAGCACAGCTGGTTCGAGACTTTCATCATCTTTCATGATCCTGCTCAG  
 CAGTGGAGCGCTGGCCTTCGAGGACATCTACCTGGAGGAGCGGAAGACCATCAAGTTTCTGCTGGAGTAC  
 GCGGACAAGATGTTACCTACGCTTTGTGTTGGAGATGCTGCTCAAGTGGTGGCTACGGCTTCAAGA  
 AGTACTTCACCAACGCTGGTGTGGCTGGACTTCTGATTGTGGACGCTCTGCTGGTCAAGCTCGTGGC  
 AAACACCTTAGGCTTCCGCCAAAATGGGTCCCATCAAGTCACTGAGGACACTGCGTGCATCTGACCCCTG  
 AGGGCCTTGTGAGATTTGAGGGCATGCGGGTGGTGGTCAATGCGCTGGTGGGCGCCATCCCTCCATCA  
 TGAACGCTCCTCGTCTGCCTCATCTTCTGGCTCATCTTTCAGCATCATGGGCGTGAACCTTTCGCCGG  
 GAAGTTCGGTAGGTGCATCAACCAGACAGAAGGGGACCTGCCTTGAACCTACACCATCGTGAACAACAAG  
 AGTGAGTGCAGTCTTCAACGTGACCGGAGAGTTGACTGGACCAAGGTGAAGGTCAACTTTGACAACG  
 TGGGAGCCGGGTACCTGGCCCTCTGCAGGTGGCGACATTTAAGGCTGGATGGACATCATGTATGCGGC  
 TGTGGACTCCAGAGGGTATGAGGAGCAGCCGAGTGGGAAGACAACCTCTACATGTACACTACTTTGTC  
 GTCTTCATCATCTTCCGCTCCTTCTTACCCTCAACCTTTCATCGGTGTATCATTGACAACCTCAAC  
 AGCAGAAGAAAAAGTTAGGGGGCCAGGATATCTTCATGACGGAGGAGCAGAAGAAGTACTACAATGCCAT  
 GAAGAAGCTGGGCTCCAAGAAACCCAGAACCCATCCCAGGCCCTTGAACAAGTACCAGGTTTCATA  
 TTCGACATTGTGACCAAGCAGGCCTTCGATGTACCATCATGTTCTCATCTGTTTGAACATGGTGACCA  
 TGATGGTGGAGACAGATGACCAGAGCCCTGAGAAGGTCAACATCTTGGCCAAGATCAACCTGCTCTTCGT  
 GGCCATCTTACAGGCGAGTGTATTGTCAAGATGGCTGCCCTGCGCCACTATTACTTCACCAACAGCTGG  
 AACATCTTCGACTTTGTGGTGGTATCCTCTCCATTGTTGGCACTGTCTCTCCGACATCATCCAGAAGT  
 ACTTCTTCTCCCGACACTTTCGGGTGATCCGTCTGGCCAGGATCGGCCGATCCTCAGGCTGATCCG  
 CGGAGCCAAGGGGATTGCGACGCTGCTTTCGCCCTCATGATGTCCCTGCCCGCCCTTCAACATCGGC  
 CTCTCTCTTCCCTCGTATGTTTACTTCCATCTTCCGATGGCCAACCTTCCGCTTACGTCAGTGGG  
 AGGCCGGCATCGATGACATGTTCAACTCCAGACCTTCGCCAACAGCATGCTGTGCTGTTCCAGATCAC  
 CACATCAGCCGGCTGGGACGGCCTCCTCAGCCCATCCTCAACACGGGGCCTCCCTACTGCGACCCCAAC  
 CTGCCAACAGCAACGGCTCCCGGGGAACTGTGGGAGCCCGCGGTGGGCATCCTCTTCTTACCACCT  
 ACATCATCATCTCTTCTCATCGTGGTCAACATGTACATCGCCATCATCTCGAGAACTCAGCGTGGC

CACCGAGGAGAGCACAGAGCCCCTGAGCGAGGACGACTTCGACATGTTCTATGAGATCTGGGAGAAGTTC  
GACCCGGAGGCCACCCAGTTCATTGAGTATCTGGCCCTGTCCGACTTTGCAGATGCCTTGTCTGAGCCGC  
TCCGCATCGCCAAACCAACCAGATAAGCCTCATCAACATGGATCTGCCATGGTGAGCGGAGACCGTAT  
CCACTGTATGGACATACTGTTTCGCTTTCACCAAGAGGGTCTCGGCGAGTCTGGGAGATGGATGCCCTG  
AAGATCCAGATGGAGGAGAAGTTCATGGCGCCAAACCTTCCAAGATCTCTACGAGCCCATCACCACCA  
CCCTGAGGAGAAAGCACGAGGAGGTGTCCGCCACGGTCATCCAGCGTGCCTTCCGGAGGCACCTGCTGCA  
GCGCTCGGTGAAGCATGCCTCCTTCTCTCCGCCAGCAAGCGGGCGGCGAGTGGCCTCTCCGACGAGGAT  
GCCCTGAGCGGGAGGGCCTCATCGCCTACATGATGAATGGGAACCTCTCTCGGCGCAGTGCCTCCGCTCT  
CCAGCTCCTCCATCTCCTCCACGTCCTTCCCCCGTCCTACGACAGCGTCACGAGAGCCACCAGTGATAA  
CCTCCCGGTGCGTCTGACTATAGCCGAGCGAAGATCTTGCAGACTTCCCTCCATCTCCAGATAGG  
GACCGAGAGTCTATCGTGTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

<b>Restriction Sites:</b>	Sgfl-Mlul
<b>ACCN:</b>	NM_001160162
<b>Insert Size:</b>	5901 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
<b>Components:</b>	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).
<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>	<u><a href="#">NM_001160162.1</a></u> , <u><a href="#">NP_001153634.1</a></u>
<b>RefSeq Size:</b>	8309 bp
<b>RefSeq ORF:</b>	5901 bp
<b>Locus ID:</b>	25665
<b>UniProt ID:</b>	<u><a href="#">P15389</a></u>
<b>Cytogenetics:</b>	8q32

**Gene Summary:**

acts as a tetrodotoxin-resistant voltage gated sodium channel; may play a role in cardiac function [RGD, Feb 2006]

Transcript Variant: This variant (2) lacks an alternate in-frame exon in the central coding region, compared to variant 1. The resulting isoform (2) lacks an internal segment, compared to isoform 1.