

## Product datasheet for RR211948

### Scn8a (NM\_019266) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Scn8a (NM_019266) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Scn8a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-Myc-DDK (PS100007)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RR211948 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGCGGGCTGCTCGCACCACCAGGCCCTGATAGTTTCAAGCCTTTCACCCCTGAGTCGCTGGCAA  
ACATCGAGAGGCGTATTGCCGAGAGCAAGCTCAAGAAACCACAAAGGCGGATGGCAGCCACCGGGAGGA  
CGATGAAGACAGCAAGCCCAAGCCAAACAGTGACCTGGAGGCTGGGAAGAGTTTGCCTTTCATCTACGGG  
GACATCCCAGGCTGGTTCGGTTCCTGGAGGACTTTGACCCCTACTATTTGACGCAGAAAACT  
TTGTAGTATTAACAGAGGGAAAACTCTCTTTCAGATTTAGTGCCACACCTGCCTTGTACATTTAAAGCCC  
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GAGGAAGTTTTCCATCATGAATCAGTCGCTGCTCAGCATTCCAGGCTCGCCCTTCTCTCCCGACATAAC  
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR211948 protein sequence  
 Red=Cloning site Green=Tags(s)

MAARLLAPPGPSFKPFTPELANIERRIAESKLLKPPKADGSHREDEDSKPKPNSDLEAGKSLPFIYG  
 DIPQGLVAVPLEDFDPYYLTQKTFVVLNRGKTLFRFSATPALYLSPFNLIRRIAIKILIHVSFMIIMC  
 TILTNCVFMFTSNPPEWSKNVEYFTGTIYTFESLVKIIARGFCIDGFTFLRDPWNWLDVSVIMMAYVTEF  
 VDLGNVSALRTRFVLRALKTISVIPGLKTIVGALIQSVKLLSDVMILTVFCLSVFALIGLQLFMGNLRNK  
 CVVWPIFNESYLENGTRGFDWEEYINNKTNFYMVPGLLEPLLGNSSDAGQCPEGFQCMKAGRNPNYGY  
 TSFDTFSWAFLLFRLMTQDYWENLYQLTLRAAGKTYMIFVFLVIFVGSFYLVNLLAVVAMAYEEQNQA  
 TLEEAEQKEAEFKAMLEQLKKQEEEAQAAAMATSAGTVSEDAIEEEGEDGVGSPRSSSEL SKLSSKSAKE  
 RRNRKRKRKQKELSEGEEKDPEKVFKSESEDMRRKAFRLPDNIRGRKFSIMNQSL SIPGSPFLSRHN  
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 PSLRRSVKRNSTVDCNGVVSLIGPGSHIGRLPEATTEVEIKKKGPGSLLVSMQDLASYGRKDRINSIMS  
 VVTNLTVEELESQRKCPWCYKFAANTFLIWECHPYWIKLKEIVNLIVMDPFVDLAITICIVLNTLFMAM  
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 LRSFRLRVFKLAKSWPTLNMLIKIIGNSV GALGNLTLVLAIIVIFAVVGMQLFGKSYKECVCKINQEC  
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 DNLAATDDDGEMNQLISVIRIKKGVAVTKVYVHAFMQAHFKQREADEVKPLDEL YEKKANCIANHTGVD  
 IHRNGDFQKNGNNTSGIGSSVEKYIIDEDHMSFINNPNTVTRVPIAVGESDFENLNTEDVSSSDPEGS  
 KDKLDDTSSSEGSTIDIKPEVEEVPVEQPPEYLDPDACFTEGCVQRFKCCQVNIIEEGLGKSWWILRKT  
 CF LIVEHNFETFIIFMILLSSGALAFEDIYEQRTIRTILEYADKVFTYIFILEMLLKWTAYGFVKFFTN  
 AWCWLDLIVAVSLVSLIANALGYSELGAIKSLRTRLRALRPLRALSRFEGMRVVNALVGAIPSIMNVLL  
 VCLIFWLIFSIMGVNLFAGKYHYCFNETSEIRFEIDIVNNKTDCEKLMEGNSTEIRWKNVKINFDNVGAG  
 YLALLQVATFKGWMDIMYAAVDSRKPDEQPDYEGNIYMYIYFVIFIFGFFTLNLFIGVIDNFNQKK  
 KFGGQDIFMTEEQKYYNAMKLGSKPKQPIPRPLNKIQGIVDFVTVQAFDIVIMMLICLNMVTMMVE  
 TDTQSKQMENILYWINLVFVIFFTCECVLKMFLRHYFTIGWNIFDFVIVLSIVGMFLADIEKYFVS  
 PTLFRVIRLARIGRILRLIKGAKGIRTLFALMMSLPALFNIGLLLFLVMFIFSIFGMSNFAYVKHEAGI  
 DDMFNFTFGNSMICLFQITTSAGWDGLLPILNRPDCLDKEHPGSGFKGDCGNPSVGIFFFVSYIII  
 SFLIVVNMYYIAIILENFSVATEESADPLSEDDFETFYE IWEKFDPDATQFIEYCKLADFADALEHPLRVP  
 KPNTIELIAMDLPVMSGDRIHCLDILFAFTKRVLGDSGELDILRQMEERFVASNPSKVSYPITTLRR  
 KQEEVSAVVLQRAYRGLARRGFI CRKMASNKLENGGTHRDKKESTPSTASLPSYDSVTKPDKEKQQRAE  
 EGRRERAKRQKEVRESKC

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



ACCN: NM\_019266

ORF Size: 5934 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](mailto: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\\_019266.2](#), [NP\\_062139.2](#)

**RefSeq Size:** 6556 bp

**RefSeq ORF:** 5937 bp

**Locus ID:** 29710

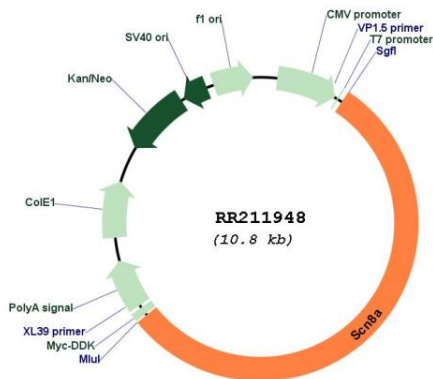
**UniProt ID:** [O88420](#)

**Cytogenetics:** 7q36

**MW:** 225.2 kDa

**Gene Summary:** tetrodotoxin-sensitive sodium channel alpha subunit [RGD, Feb 2006]

### Product images:



Circular map for RR211948