

Product datasheet for MC225126

Scn5a (NM_021544) Mouse Untagged Clone

Product data:

| | |
|----------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Scn5a (NM_021544) Mouse Untagged Clone |
| Tag: | Tag Free |
| Symbol: | Scn5a |
| Synonyms: | mH1; Nav1.5; Nav1.5c; SkM1; SkM2 |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Cell Selection: | Neomycin |
| Fully Sequenced ORF: | >MC225126 representing NM_021544 Red=Cloning site Blue=ORF Orange=Stop codon |

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAAACCTTCCTGTTACCTCGGGCACCAGCAGCTTCCGTAGGTTACCCGGGAGTCACTGGCGGCCA
TCGAGAAGCGCATGGCTGAAAAACAAGCCCGTGGTTCGGCCACCTCACAGGAGAGCCGTGAGGGCCTGCC
AGAGGAGGAGGCTCCCCGGCCCCAGCTGGACCTACAGGCCCTCAAAAAGCTGCCAGATCTCTATGGCAAC
CCACCCGAGAGCTCATTGGGGAGCCCTGGAAGACCTGGACCCTTTCTATAGTACCCAGAAGACCTTCA
TCGTGCTGAATAAGGGCAAAACCATCTCCGGTTCAGTGCCACCAATGCCTTGTACGTCCTCAGCCCTT
CCACCCGGTGCAGAGCGGCTGTGAAGATTTGGTACATTTCGCTCTTCAGCATGCTCATCATGTGCACC
ATCCTAACCAACTGTGTGTTTCATGGCACAACACGACCCTCCGCTTGGACCAATATGTTGAGTACACCT
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CTTCTCCGGGACCCGTGGAACCTGGCTAGACTTCAGTGTGATCGTCATGGCGTATGTATCAGAGAATATA
AAGCTAGGCAATTTGTCGGCTCTCGAATTTTCAGAGTCTGAGAGCTCTGAAAACGATTTTCAGTTATTC
CAGGCCTGAAGACAATCGTGGGAGCCCTAATCCAGTCTGTGAAGAAGCTAGCCGATGTGATGGTCTTAC
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GAACAGCTCTGATGCCGGGACATGTCTGAAGGCTACCGGTGCCTGAAGGCAGGTGAGAACCCTGACCAC
GGTTACACCAGCTTCGACTCCTTCGCTGGGCTTTCCTTGCCTCTTCCGCTGATGACACAGGACTGCT
GGGAACGTCTATACCAGCAGACCCTGAGGTCCGAGGAAAGATCTACATGATCTTCTTCATGCTTGTGCAT
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CAAGCCACCATCGCCGAGACGGAAGAGAAGGAGAAGCGTTTCCAGGAGGCCATGGAGATGCTCAAGAAGG
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CCCAGTAACCAACCATGAGAGAAGGAGCAAGAGGAGGAAACGACTGTCTTCCAGGGACAGAGGATGGCGGA
GATGACAGGCTCCCAAGTCGGACTCAGAAGACGGTCCAGAGCATTGAATCAGCTCAGCCTCACCCTATG



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GGCTCAGCCGGACATCCATGAGGCCCGCTCCAGCCGAGGGAGCATTTCACATTCGGCGACGGGACCA
 AGGCTCCGAGGCAGATTTTGCAGATGACGAGAACAGTACAGCAGGAGAGAGCGAGAGCCACCGCACATCG
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 ATCTCTTCTTGGCCTTGTGCTCAGTCTTTCAGCGCAGACAACCTCACAGCCCTGACGAGGATGGGGA
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 TGGGCGTGAACCTCTTCCCGGGAAGTTCGGTAGGTGCATCAACCAGACCAGGGGACCTGCCTGTAA
 CTACACCATTGTGAACAACAAGAGCGAGTGTGAGTCTTCAACGTGACTGGAGAGTTGTACTGGACCAAG
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 GGATGGACATCATGTATGCGGCTGTGGACTCCAGAGGGTATGAAGAGCAGCCGAGTGGGAGGACAACCT
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 GTCATCATTGATAACTTCAACCAGCAGAAGAAAAGTTAGGGGGCCAGGACATCTTTCATGACGGAGGAGC
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 GAACAAGTACCAGGGTTTCATATTCGACATTGTGACCAAGCAGGCCTTCGATGTTACCATCATGTTCTC
 ATCTGTTTAAACATGGTGACCATGATGGTAGAGACAGATGATCAGAGCCCTGAAAAGTCAACATCTTGG
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 CTATTACTTACCACAGCTGGAACATCTTCGATTTCTGGTGTGTCATCTCTCCATCGTTGGCACTGTC
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 GCCCGCCCTTCAACATCGGCCTCTCTCTCTCTCTGTCATGTTTCATCTACTCCATCTTCCGATGGCC
 AACTTTGCTACGTCAAGTGGGAGGCTGGCATCGACGACATGTTCAACTTCCAGACCTTTGCCAACAGCA
 TGCTGTGCTTTTCCAGATCACCACGTGCGTGGTGGATGGCTCCTCAGCCCATCTCAACACAGG

ACCCCCCTACTGTGACCCCAACCTGCCCAACAGCAATGGCTCCAGGGGAACTGTGGGAGCCCAGCAGTG
 GGCATCCTCTTCTTACCACCTACATCATCTCCTTCTCATCGTGGTCAACATGTACATTGCCATCA
 TCCTGGAGAACTTCAGTGTGGCCACAGAAGAGAGCACAGAGCCCTGAGCGAGGATGACTTCGACATGTT
 CTATGAGATCTGGGAGAAGTTCGACCCGGAGGCCACCCAGTTCATTGAGTATTTGGCCCTGTCCGACTTT
 GCCGATGCCCTGTCTGAGCCACTCCGCATCGCCAAGCCCAACCAGATAAGCCTCATCAATATGGACCTGC
 CCATGGTGAGCGGGGACCGCATCCACTGTATGGACATCCTGTTTCGCTTACCAAGAGGGGTGCTCGGGGA
 GTCTGGGAGATGGATGCCCTGAAGATCCAGATGGAGGAGAAATTCATGGCGCCACGGTTCATCCAGCGGG
 TCCTATGAGCCCATCACCACCCTGCGGCGAAAACATGAGGAGGTGTCGGCCACGGTTCATCCAGCGGG
 CCTTCCGGAGGCACCTCCTGCAGCGCTCGGTGAAGCATGCTTCTTCTTCCGCCAGCAAGCGGGCAG
 CAGTGGCCTCTCTGATGAGGATGCCCCGAGCGAGAGGGACTCATTGCCTACATGATGAATGAGAACTTC
 TCCCGGCGCAGCGGTCCCTCTCCAGCTTCCATCTCCTCCACGTCCTTCCACCGTCTATGACAGCG
 TCACGAGGGCCACCAGTGATAACCTCCCAGTGCCTGCGTGGACTACAGCCGAGCGAAGATCTTGACAGA
 CTTCCCTCCATCTCCAGATAGGGACCGAGAGTCTATAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-Mlul
- ACCN:** NM_021544
- Insert Size:** 6063 bp
- OTI Disclaimer:** 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).
- 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_021544.4](#), [NP_067519.2](#)
- RefSeq Size:** 8455 bp
- RefSeq ORF:** 6063 bp
- Locus ID:** 20271
- UniProt ID:** [Q9JIV9](#)
- Cytogenetics:** 9 71.33 cM

Gene Summary:

This protein mediates the voltage-dependent sodium ion permeability of excitable membranes. Assuming opened or closed conformations in response to the voltage difference across the membrane, the protein forms a sodium-selective channel through which Na(+) ions may pass in accordance with their electrochemical gradient (PubMed:11834499, PubMed:23420830). It is a tetrodotoxin-resistant Na(+) channel isoform. This channel is responsible for the initial upstroke of the action potential. Channel inactivation is regulated by intracellular calcium levels (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript and it encodes the longer protein (isoform 1).