

Product datasheet for MC210878

Scnm1 (NM 001163573) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Scnm1 (NM_001163573) Mouse Untagged Clone

Tag: Tag Free Symbol: Scnm1

Synonyms: 3110001I17Rik; Scnm1-ps

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC210878 representing NM_001163573

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTCTTTTAAGAGGGAAGGGACGACTGGAGTCAACTCAATGTGCTCAAAAAAACGGAGAGTTTGGGGACC TGCTGGCTAGTTACATCCCTGAGGACGACGACTGATGCTGCGGGATGGACGCTTTGCTTGTGCCATCTG CCCCCATCGACCAGTACTAGACACGCTGGCCATGTTGACAGCCCACCGTGCAGGCAAGAAGCATTTGTCC AGTCTGAAGCTTTTCTATGGCAAAAAGCAAAAGCAAACAGGCAAGGGAACAGAACAGAAAATCCAAGAACAGAAACCGAAACCG AATTGAAGACAGAAAACTGAGGCTCCTTTGCTAACCCAGAATCATCACCCAGAATGCTCT ACACAGAGCTCCCCACTATAACAGTTGCTGCCGGAGGAAGCACAGCTCTGGATGGGTCCCAGATGGACGA GGTCGATGGATAAAAGGATGAAAATGTTGAGTTTGACTCTGATGAGGAAGAGCCCCCCGATCTCCCCTTGG

ACTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM_001163573

Insert Size: 495 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).



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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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 001163573.1</u>, <u>NP 001157045.1</u>

RefSeq Size: 693 bp
RefSeq ORF: 495 bp
Locus ID: 69269
UniProt ID: Q8K136
Cytogenetics: 3 40.74 cM

Gene Summary: Mutations in the voltage-gated sodium channel gene Scn8a lead to neurological problems in

mice. For one particular mutation, Scn8amedJ, mice live to adulthood but have tremors and muscle weakness, among other problems, in all strains except those derived from C57BL6 mice. In these strains, the product of the Scnm1 gene (229 aa) partially overcomes the effects of the Scn8amedJ mutation. However, in C57BL6-derived mice, a one nt change in the penultimate exon creates a premature stop codon, truncating the Scnm1 protein at 186 aa. This truncated protein lacks the ability to overcome the effects of the Scn8amedJ mutation,

and these mice suffer paralysis and juvenile death. [provided by RefSeq, Jul 2009]

Transcript Variant: This variant (2) lacks the exon containing the stop codon compared to variant 1. The resulting isoform (2) has a shorter and distinct C-terminus compared to isoform

1.