

Product datasheet for MR215391

Scnm1 (NM_001163573) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Scnm1 (NM_001163573) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Scnm1
Synonyms: 3110001117Rik; Scnm1-ps
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR215391 representing NM_001163573
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCTTTAAGAGGGAAGGGGACGACTGGAGTCAACTCAATGTGCTCAAAAACGGAGAGTTGGGGACC
 TGCTGGCTAGTTACATCCCTGAGGACGAGGCACTGATGCTGCGGGATGGACGCTTTGCTTGCCATCTG
 CCCCCATCGACCACTACTAGACACGCTGGCCATGTTGACAGCCACCGTGCAGGCAAGAAGCATTGTCC
 AGTCTGAAGCTTTTCTATGGCAAAAAGCAACAGGCAAGGGAACAGAGCAAAATCCAAGACAGCAGAACC
 AATTGAAGACAGAAAGCAAACTGAGGCTCCTTTGCTAACCCAGACTCGAATCATCACCCAGAATGCTCT
 ACACAGAGCTCCCCACTATAACAGTTGCTGCCGGAGGAAGCACAGCTCTGGATGGGTCCCAGATGGACGA
 GGTCGATGGATAAAGGATGAAAAATTGAGTTGACTCTGATGAGGAAGAGCCCCCGATCTCCCCTTGG
 AC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR215391 representing NM_001163573
 Red=Cloning site Green=Tags(s)

MSFKREGDDWSQLNVLKRRVGDLLASYIPEDEALMLRDGRFACAICPHRPVLDLAMLTAHRAGKKHLS
 SLKLFYGGKQTGKGTEQNPQQNELKTESKTEAPLLTQTRIIITQNALHRAPHYNSCCRRKHSSGWVPDGR
 GRWIKDENVEFDSDEEPPDLPLD

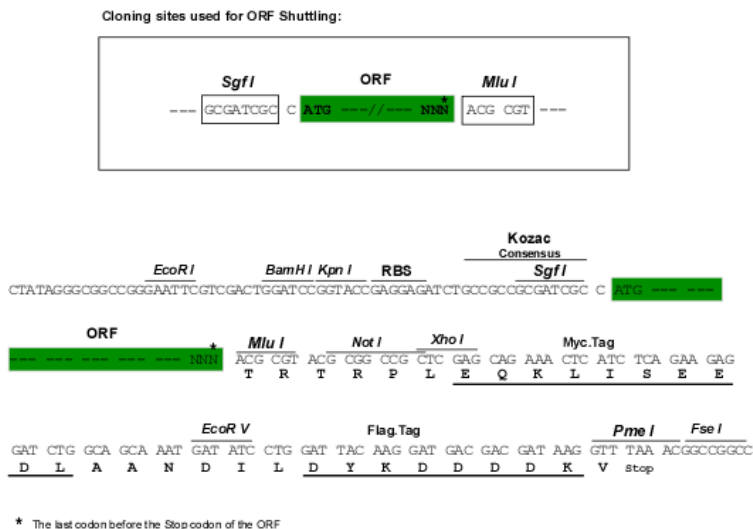
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

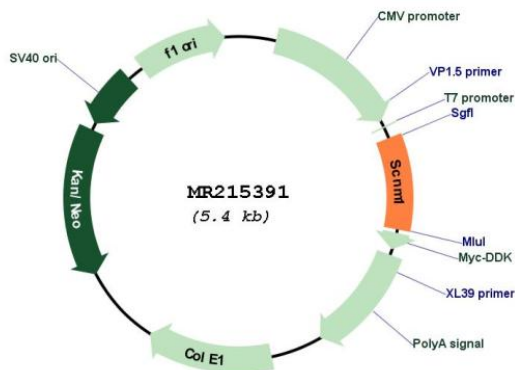


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001163573

ORF Size: 492 bp

OTI Disclaimer: 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:	<ol style="list-style-type: none">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:	<u>NM_001163573.1</u> , <u>NP_001157045.1</u>
RefSeq Size:	693 bp
RefSeq ORF:	495 bp
Locus ID:	69269
UniProt ID:	<u>Q8K136</u>
Cytogenetics:	3 40.74 cM
MW:	19.2 kDa
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]