

Product datasheet for **MC222829**

Slc8a1 (NM_001112798) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc8a1 (NM_001112798) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Slc8a1
Synonyms:	AI852629; AV344025; D930008O12Rik; Ncx1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF:

>MC222829 representing NM_001112798

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGCTTCGATTAAGTCTCCACCCAATGTTTCAATGGGATTTCTGTCGGTAGCTCTGGTGGCTCTCTTGT
TTTCCCATGTTGACCATATAACTGCAGATACAGAGGCAGAAACAGGAGGAAATGAAACCACTGAATGTAC
TGGCTCATATTACTGTAAGAAAGGGTGATCTTGCCCATTTGGGAACCCCAAGACCCATCTTTTGGGGAC
AAAATTGCTAGAGCAACTGTGTATTTGTGGCCATGGTCTACATGTTCTTGGAGTTTCTATTATTGCAG
ACCGGTTTATGTCCTCTATAGAGGTCACTACCTCTCAAGAGAAAGAAATAACGATAAAGAAACCGAATGG
AGAGACCACCAAGACGACGGTGAGAATCTGGAACGAGACTGTGTCGAACCTGACCTTGATGGCCCTGGGA
TCTTCTGCTCCTGAGATTCTCTGTCAGTCATTGAAGTGTGGCCATAACTTCACCGCAGGGGACCTGG
GTCCCAGCACCATCGTGGGAAGTGTGCCTTTAACATGTTTCATCATAATCGCACTCTGTGTTACGTGGT
CCCTGATGGAGAGACAAGGAAGATCAAGCATCTGCGTGTGTTCTTTGTGACAGCAGCCTGGAGCATCTTT
GCCTATACCTGGCTTTATATAATCTTGTCTGTCAGCTCTCCTGGAGTTGTGGAGGTCTGGGAAGGCTTGC
TTACTTTCTTCTTCTTCCCATCTGCGTTGTGTTGCGGTGGTAGCAGACAGGCGCTTCTCTTTTACAA
GTATGTCTACAAGCGGTACAGGGCCGGCAAGCAGAGGGGGATGATCATTGAACATGAAGGAGACAGACCA
GCTTCCAAAACCTGAAATCGAAATGGATGGGAAAGTGGTCAACTCTCATGTTGACAATTTCTTAGATGGGG
CTCTGGTTTTGGAAGTTGATGAGAGGGACCAAGATGATGAGGAAGCCAGGCGTGAGATGGCAAGGATTCT
GAAGGAACTTAAGCAGAAGCATCCTGAGAAAGAAATTGAGCAATTAATAGAATTAGCCAACCTACCAGGTC
CTAAGTCAACAGCAGAAAAGCCGAGCATTTTACAGGATTCAAGCTACTCGCTGATGACCGGAGCTGGCA
ACATCTTGAAGAGGCACGCAGCTGATCAAGCAAGGAAGGCTGTGATGATGCAATGAAGTCAACATGGAAAT
GGCTGAAAACGACCCAGTCAGTAAGATCTTCTTTGAGCAAGGAACATACCAGTGTCTAGAGAAGTGTGGT
ACTGTGGCCCTCACCATATGCGCAGAGGGGGCGACTTGAGCACCCTGTGTTTGTGACTTCAGGACAG
AAGACGGCACAGCCAATGCTGGGTCTGATTATGAATTCACGGAAGGGACTGTGATCTTCAAACAGGGGA
GACCCAGAAGGAAATCAGAGTTGGCATCATTGATGATGATATCTTTGAAGAAGATGAAAACCTTCTTGTG
CATCTTAGCAATGTCAGAGTCTCTTCTGATGTTTCTGAGAGATGGCATACTAGAATCCAATCACGCTTCTT
CAATTGCTTGTCTGGGTCAACAGCACTGCCACCATAACCATTTTTGATGATGACCATGCAGGCATCTT
TACATTTGAGGAACCCGTGACTCACGTGAGCGAGAGCATTGGCATCATGGAGGTGAAGGTTTTGAGAACC
TCTGGAGCTCGAGGAAATGTTATCATTCCCTACAAAACCTATTGAAGGCACAGCCGAGGTGGAGGGGAAG
ACTTTGAGGACACCTGTGGAGAGCTCGAATTCAGAACGATGAAATAGTCAAAACAATATCAGTCAAGGT
AATCGATGACGAGGAGTATGAGAAAAACAAGACCTTCTTCAATTGAGATTGGAGAGCCCGCTCGGTGGAG
ATGAGTGAGAAGAAAGGTGGCTTACATTAACAGGCCAACCTATCTTCAAGAAAGTCCATGCTAGAGATC
ATCCGATTCCTCTACTGTAATCACCATCTCAGAGGAATATGATGACAAGCAGCCACTGACCAGCAAAGA
AGAGGAGGAGAGGGCGCATTGCGGAAATGGGGCGCCCATCCTAGGCGAGCACACCAAGCTGGAGGTGATC
ATCGAAGAGTCTTACGAATTCAGAGCACTGTGGACAACTCATTAAAGAAGACGAACCTGGCCCTTGTGG
TGGGACCAACAGCTGGAGAGAGCAGTTTATCGAAGCCATCACTGTCAGCGCTGGGAAGATGACGATGA
TGATGAATGTGGGAGGAGAAGCTGCCCTCCTGTTTTGATTACGTGATGCACTTTCTCACAGTGTCTGG
AAGGTTCTGTTTGCCTTCGTCCACCTACAGAATACTGGAATGGCTGGCCTGCTTCATTGCTCCATCC
TCATGATCGGCCTACTGACCGCCTTCAATTGGAGACCTGGCTTCCCACTTTGGCTGCACCATTGGTCTGAA
AGATTCGGTACTGCCGTTGTGTTTGTGCTCTTGGAACTCGGTGCCAGACACATTTGCCAGCAAAGTA
GCAGCTACCCAGGACCAGTATGCAGATGCGTCTATAGGCAATGTCAGTGAAGCAATGCTGTGAATGTCT
TCCTGGGAATCGGCGTGGCCTGGTCCATTGCTGCCATCTACCATGCGGCCAACGGGAACAGTTCAAAGT
GTCCCCGGCACGCTAGCTTTCTGTCACTCTTCACTATTTTGTCTTTCATCAACGTGGGGTGTG
CTGTATCGGCGGAGGCCAGAAATAGGAGGTGAGCTGGGAGGGCCCGGACTGCCAAGCTCCTCACATCTT
CCCTGTTTGTGCTCCTGTGGCTTGTACATTTTCTTCTCCTCCCTGGAAGCCTACTGCCACATAAAGGG
CTTCTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001112798
Insert Size:	2877 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:	<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_001112798.2</u> , <u>NP_001106269.1</u>
RefSeq Size:	18573 bp
RefSeq ORF:	2877 bp
Locus ID:	20541
Cytogenetics:	17 51.29 cM
Gene Summary:	<p>Mediates the exchange of one Ca(2+) ion against three to four Na(+) ions across the cell membrane, and thereby contributes to the regulation of cytoplasmic Ca(2+) levels and Ca(2+)-dependent cellular processes (PubMed:8659820). Contributes to Ca(2+) transport during excitation-contraction coupling in muscle. In a first phase, voltage-gated channels mediate the rapid increase of cytoplasmic Ca(2+) levels due to release of Ca(2+) stores from the endoplasmic reticulum. SLC8A1 mediates the export of Ca(2+) from the cell during the next phase, so that cytoplasmic Ca(2+) levels rapidly return to baseline (PubMed:10967099). Required for normal embryonic heart development and the onset of heart contractions (PubMed:10967099).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (B) lacks two in-frame exons in the coding region, compared to variant A. The resulting isoform (B) lacks two internal segments, compared to isoform A.</p> <p>Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.</p>