

## Product datasheet for **MC222900**

### **Slc8a1 (NM\_011406) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Slc8a1 (NM_011406) 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)



[View online »](#)

**Fully Sequenced ORF:**

>MC222900 representing NM\_011406  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCTTCGATTAAGTCTCCACCCAATGTTTCAATGGGATTTTCGTCGGTAGCTCTGGTGGCTCTCTTGT  
 TTCCCATGTTGACCATATAACTGCAGATACAGAGGCAGAAACAGGAGGAAATGAAACCACTGAATGTAC  
 TGGCTCATATTACTGTAAGAAAGGGGTGATCTTGCCATTTGGGAACCCCAAGACCCATCTTTTGGGGAC  
 AAAATTGCTAGAGCAACTGTGTATTTGTGGCCATGGTCTACATGTTCTTGGAGTTTCTATTATTGCAG  
 ACCGGTTTATGTCCTCTATAGAGGTCACTCACTCTCAAGAGAAAGAAATAACGATAAAGAAACCGAATGG  
 AGAGACCACCAAGACGACGGTGAGAATCTGGAACGAGACTGTGTCGAACCTGACCTTGATGGCCCTGGGA  
 TCTTCTGCTCCTGAGATTCTCTGTCAGTCATTGAAGTGTGCGGCCATAACTCACCGCAGGGGACCTGG  
 GTCCCAGCACCATCGTGGGAAGTGTGCCTTTAACATGTTTCATCATAATCGCACTCTGTGTTACGTGGT  
 CCCTGATGGAGAGACAAGGAAGATCAAGCATCTGCGTGTGTTCTTTGTGACAGCAGCCTGGAGCATCTTT  
 GCCTATACCTGGCTTTATATAATCTTGTCTGTCAGCTCTCCTGGAGTTGTGGAGGTCTGGGAAGGCTTGC  
 TTACTTTCTTCTTTCCCATCTGCGTTGTGTTGCGGTGGTAGCAGACAGGCGGCTTCTCTTTTACAA  
 GTATGTCTACAAGCGGTACAGGGCCGGCAAGCAGAGGGGGATGATCATTGAACATGAAGGAGACAGACCA  
 GCTTCCAAAACGAAATCGAAATGGATGGGAAAGTGGTCAACTCTCATGTTGACAATTTCTTAGATGGGG  
 CTCTGGTTTTGGAAGTTGATGAGAGGGACCAAGATGATGAGGAAGCCAGGCGTGAGATGGCAAGGATTCT  
 GAAGGAACTTAAGCAGAAGCATCCTGAGAAAGAAATTGAGCAATTAATAGAATTAGCCAACCTACCAGGTC  
 CTAAGTCAACAGCAGAAAAGCCGAGCATTTTACAGGATTCAAGCTACTCGCTGATGACCCGAGCTGGCA  
 ACATCTTGAAGAGGCACGCAGCTGATCAAGCAAGGAAGGCTGTGATGATGCAATGAAGTCAACATGGAAAT  
 GGCTGAAAACGACCCAGTCAGTAAGATCTTCTTTGAGCAAGGAACATACCAGTGTCTAGAGAAGTGTGGT  
 ACTGTGGCCCTCACCAATTATGCGCAGAGGGGGCGACTTGAGCACCCTGTGTTTGTGACTTCAGGACAG  
 AAGACGGCACAGCCAATGCTGGGTCTGATTATGAATTCACGGAAGGGACTGTGATCTTCAAACAGGGGA  
 GACCCAGAAGGAAATCAGAGTTGGCATCATTGATGATGATATCTTTGAAGAAGATGAAAACCTTCTTGTG  
 CATCTTAGCAATGTCAGAGTCTCTTTCAGATGTTTCAGAAGATGGCATACTAGAATCCAATCACGCTTCTT  
 CAATTGCTTGTCTGGGTACCCAGCACTGCCACCATAACCAATTTTGTGATGACCATGCAGGCATCTT  
 TACATTTGAGGAACCCGTGACTCACGTGAGCGAGAGCATTGGCATCATGGAGGTGAAGGTTTTGAGAACC  
 TCTGGAGCTCGAGGAAATGTTATCATTCCCTACAAAACCTATTGAAGGCACAGCCGAGGTGGAGGGGAAG  
 ACTTTGAGGACACCTGTGGAGAGCTCGAATTCAGAACGATGAAATAGTCAAAACAAATATCAGTCAAGGT  
 AATCGATGACGAGGAGTATGAGAAAAACAAGACCTTCTTCATTGAGATTGGAGAGCCCCGCTCGGTGGAG  
 ATGAGTGAGAAGAAAGCCCTGTTGTTGAATGAGCTTGGTGGCTTACATTAACAGGAAAAGAGATGTATG  
 GCCAACCTATCTTCAGGAAGGTCCATGCTAGAGATCATCCGATCCCTCTACTGTAATCACCATCTCAGA  
 GGAATATGATGACAAGCAGCCACTGACCAGCAAAGAAGAGGAGGAGAGGCGCATTGCGGAAATGGGGCGC  
 CCCATCCTAGGCGAGCACACCAAGCTGGAGGTGATCATCGAAGAGTCTTACGAATTAAGAGCACTGTGG  
 ACAAACTCATTAAAGAAGCAGAACCTGGCCCTTGTGGTGGGGACCAACAGCTGGAGAGAGCAGTTTATCGA  
 AGCCATCACTGTCAGCGCTGGGGAAGATGACGATGATGATGAATGTGGGAGGAGAAGCTGCCCTCCTGT  
 TTTGATTACGTGATGCACTTTCTCACAGTGTCTGGAAGGTTCTGTTTGCCTTCGTCACCTACAGAAT  
 ACTGGAATGGCTGGCCCTGCTTCAATGTCTCCATCCTCATGATCGGCCTACTGACCGCTTCAATTGGAGA  
 CCTGGCTTCCACTTTGGCTGCACCATTGGTCTGAAAGATTCCGTGACTGCCGTTGTGTTTGTGCTCTT  
 GGAACCTCGGTGCCAGACACATTTGCCAGCAAAGTAGCAGCTACCCAGGACCAGTATGCAGATGCGTCTA  
 TAGGCAATGTCAGTGAAGCAATGCTGTGAATGCTTCTCGGAAATCGGCGTGGCTGGTCCATTGCTGC  
 CATCTACCATGCGGCCAACGGGAACAGTTCAAAGTGTCCCCGGCAGCTAGCTTTCTCTGCTACTCTC  
 TTCATATTTTGTCTTTCATCAACGTGGGGTGTGCTGTATCGGCGGAGGCCAGAAATAGGAGGTGAGC  
 TGGGAGGGCCCCGACTGCCAAGCTCCTCACATCTCCCTGTTTGTGCTCCTGTGGCTCTGTACATTTT  
 CTCTCCTCCCTGGAAGCCTACTGCCACATAAAGGGCTT**TAA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

<b>Restriction Sites:</b>	Sgfl-Mlul
<b>ACCN:</b>	NM_011406
<b>Insert Size:</b>	2913 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_011406.3</a> , <a href="#">NP_035536.2</a>
<b>RefSeq Size:</b>	18609 bp
<b>RefSeq ORF:</b>	2913 bp
<b>Locus ID:</b>	20541
<b>UniProt ID:</b>	<a href="#">P70414</a>
<b>Cytogenetics:</b>	17 51.29 cM
<b>Gene Summary:</b>	<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 (A) encodes the longest isoform (A). 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>