

## Product datasheet for **MR227222**

### Slc11a1 (NM\_013612) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Slc11a1 (NM_013612) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc11a1
Synonyms:	Bcg; lty; ity; lty1; Lsh; Nramp; Nramp1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR227222 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGATTAGTGACAAGAGCCCCCGAGGCTGAGCAGGCCAGTTATGGCTCCATTTCCAGCCTGCCTGGCC  
 CAGCACCTCAGCCAGCGCTTGCCGGGAGACCTACCTGAGTGAGAAGATCCCATTCCCAGCGCAGACCA  
 GGGTACATTACAGCCTGAGGAAGCTGTGGCGTTACGGGGCTGGTTTCTCATGAGCATCGCTTTCCTT  
 GACCCGGGAAACATTGAGTCCGACCTTCAAGCTGGCGCTGTGGCTGGGTTCAAACCTCTGGGTGCTGC  
 TCTGGGCGACTGTGCTAGGTTTGTGTGCCAGCGGCTGGCTGCCCGCTGGGCGTGGTGACAGGCAAGGA  
 CTTGGGTGAAGTCTGCCATCTCTACTACCCCAAGGTGCCCGCATCTCTCTGGCTGACCATTGAGCTG  
 GCCATTGTGGGCTCAGATATGCAGGAAGTCATCGGGACGGCTATCTCTTCAATCTGCTCTCCGCTGGAC  
 GCATCCCCTGTGGGACGGTACTGATCACCATTGTGGACACCTTCTTCTTCTTCTTGGATAACTA  
 TGGTTTGCAGCTGGAAGCTTCTTTCGGTCTCCTCATTACCATAATGGCTTTGACCTTCGGCTATGAG  
 TATGTGGTAGCACACCTTCCCAGGGAGCGCTCCTTAAGGGCCTGGTGTGCCACCTGTCCGGGCTGTG  
 GGCAGCCCAGGCTGCTGCAGGCAGTGGGCATCGTCGGTGGCCATCATGCCCCATAACATCTACCTGCA  
 CTCAGCCTTGGTCAAGTCTAGAGAAGTAGACAGAACCCGCCGGGTGGATGTTGAGAAGCCAACATGTAC  
 TTCCTGATTGAGGCCACCATCGCCCTATCGGTGTCCTTCAATCAACCTCTTCTGTCATGGCTGTTTTTG  
 GTCAGGCCTTCTACCAGCAAACCAATGAGGAAGCGTTCACATCTGTGCCAACAGCAGCCTCCAGAACTA  
 TGCTAAGATCTTCCCAGGGACAATAACACTGTGTGAGTGGATATTTATCAAGGAGGTGTGATCCTAGGC  
 TGTCTCTTGGCCCTGCCGCCCTCTACATCTGGCAGTAGGCTCCTGGCAGCGGGCAGAGTTCTACTA  
 TGACCCGCACCTATGCAGGACAGTTCGTGATGGAGGTTTCTTAAGCTGCGGTGGTCCCGCTTCGCTCG  
 GGTCTTCTCACGCGCTTTCGCCCATCCTGCCACTGTGTTGGTGGCTGTCTCCGAGACCTGAAGGAC  
 CTGTCCGGCTCAACGATCTACTCAATGTTCTGCAGAGTCTACTGCTGCCCTTCGCTGACTGCCCATTT  
 TGACTTTCACCAGCATGCCAGCTGTGCAGGAGTTTGCCAACGGCCGGATGAGCAAAGCCATCACTTC  
 GTGCATCATGGCGCTAGTCTGCGCCATCAACCTGTACTTTGTGATCAGCTACCTGCCAGCCTCCCGCAC  
 CCTGCCTACTTTGGCCTTGTGGCTCTGTTGCAATAGGTTACTTTGGCCTGACTGCTTATCTGGCCTGGA  
 CCTGTTGCATCGCCACGGAGCCACCTTCTGACCACAGCTCCACAAGCACTTCTATATGGGCTCCC  
 TAACGAGGAGCAGGGAGGCGTGCAGGGTCCGGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR227222 protein sequence  
 Red=Cloning site Green=Tags(s)

MISDKSPRLSRPSYGSISSLPGPAPQPAPCRETYLSEKIPISADQGTFLRKLWAFWTPGFLMSIAFL  
 DPGNIESDLQAGAVAGFKLLWLLWATVLLCQRLAARLGVVTGKDLGEVCHLYPKVPRILLWLTIEL  
 AIVGSDMQEVIPTAISFNLLSAGRIPLDGVLITIVDTFFFLFDNYGLRKLKLEAFFLLITIMALTFGYE  
 YVVAHPSQGALLKGLVLPCTPGCGQPELLQAVGIVGAIIMPHNIYLHSALVKSREVDTRRRVDVREANMY  
 FLIEATIALSVSFIINL FVMAVFGQAFYQQTNEEAFNICANSSLQNYAKIFPRDNNVSVDIYQGGVILG  
 CLFGPAALYIWA VGLLAAGQSSTMTGT YAGQFVMEGFLKLRWSRFARVLLTRSCAILPTVLVAVFRDLKD  
 LSGLDLLNVLQSLLLPFAVLPILFTTSM PAVMQEFANGRMSKAITSCIMALVCAINLYFVISYLP SLPH  
 PAYFGLVALFAIGYLGLTAYLAWTCCIAHGATFLTHSSHKHFLYGLPNEEQGGVQSG

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**ACCN:** NM\_013612

**ORF Size:** 1647 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:**
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\\_013612.2](#), [NP\\_038640.2](#)

**RefSeq Size:** 2304 bp

**RefSeq ORF:** 1647 bp

**Locus ID:** 18173

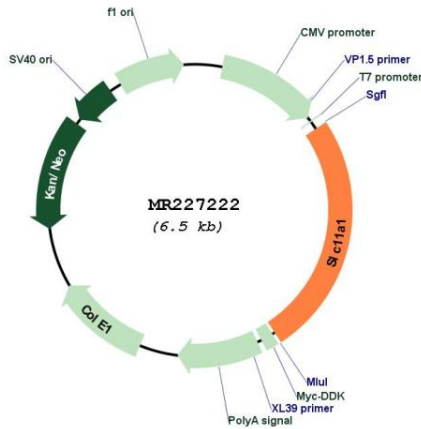
**UniProt ID:** [P41251](#)

**Cytogenetics:** 1 38.54 cM

**MW:** 59.7 kDa

**Gene Summary:** Divalent transition metal (iron and manganese) transporter involved in iron metabolism and host resistance to certain pathogens. Macrophage-specific membrane transport function. Controls natural resistance to infection with intracellular parasites. Pathogen resistance involves sequestration of Fe(2+) and Mn(2+), cofactors of both prokaryotic and eukaryotic catalases and superoxide dismutases, not only to protect the macrophage against its own generation of reactive oxygen species, but to deny the cations to the pathogen for synthesis of its protective enzymes.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR227222