

Product datasheet for **MR224625**

Slc11a2 (NM_001146161) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc11a2 (NM_001146161) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc11a2
Synonyms:	DCT1; DMT1; mk; Nramp2; van
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR224625 representing NM_001146161
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGTGTGGATCCTAAAGAAAAGATGCCAGACGATGGCGCTTCTGGGGACCATGGAGACTCTGCCAGCC
 TTGGCGCCATCAACCCTGCCTACAGCAACTCATCCCTCCACATTCCACTGGAGACTCTGAGGAGCCCTT
 CACCACCTACTTTGATGAGAAAAATCCCCATTCTGAGGAGGAGTACTCTTGTTTTAGCTTTCGTAAGCTC
 TGGCGCTTACGGGGCCTGGCTTCTTATGAGCATTGCCTACCTAGACCCAGGAAACATCGAATCTGATT
 TGCAGTCTGGAGCAGTGGCTGGATTTAAGCTGCTCTGGGTGCTCCTTTGGCCACCATTGTGGGGCTGCT
 GCTCCAGCGCCTTGACGCGAGACTTGGAGTGGTACCAGGCTTGCATCTTGCTGAAGTATGCACCGTCAG
 TATCCCAAGTCCACGGATCATCCTGTGGCTGATGGTGGAGTTGGCAATCATTGGTTCTGACATGCAGG
 AAGTATTGGCTCAGCCATCGCCATCAATCTCCTGTCTGCAGGAAGGGTCCCCCTGTGGGGCGGAGTCT
 CATCACCATCGCAGACACTTTTGTGTTCTTTTTTTGGACAAATATGGCTTGCAGGAGCTGGAAGCGTTT
 TTTGGCTTCTCATCACTATCATGGCCCTCACGTTTGGATATGAGTACATTACAGTGAAGCCAGCCAGA
 GCCAAGTACTCAGGGCATGTTCTGTCGCTCCTGTCCAGGGTGCCGCACCCCTCAGTGGAGCAGGCCGT
 GGGCATCGTGGGAGCTGTGATCATGCCGCAACATGTACCTGCATTCTGCCTTAGTCAAGTCTAGACAG
 GTGAATCGGGCCAATAAGCAGGAAGTCCGGGAAGCCAATAAGTACTTCTTCATCGAGTCTGCATCGCGC
 TCTTTGTTTCTTCATCATCAATGTCTTTGTGCTGTCCGCTCTTTGCTGAAGCATTTTTGAGAAAACCA
 CAAGCAGGTGGTTGAAGTCTGCAAAAATAACAGCAGCCCCATGCTGACCTTTTCCCAGTGACAACTCT
 ACTCTGGCTGTGGACATCTACAAAGGGGTGTTGTGCTTGGATGTTACTTCGGGCCTGCAGCTCTCTACA
 TCTGGGAGTGGGATCCTGGCTGCCGGTCAGAGCTCCACCATGACTGGAACCTATTCTGGCCAGTTTGT
 CATGGAGGGATTCTGAACCTAAAATGGTCCGCTTTGCCGAGTGATCCTGACCCGGTCTATCGCCATC
 ATCCCCACCTGCTCGTCTGCTTCCAGGATGTGGAGCACCTAACGGGGATGAATGACTTCTGAATG
 TCCTGCAGAGCTTACAGCTCCCCTTTGCTCTCATACCCATCCTCACGTTTACAAGCCTGCCGCCAGTGAT
 GAGTGAGTTTTCAATGGAATAGGCTGGAGGATTGCCGGTGGCATCCTGGTCTGATCGTCTGCTCCATC
 AACATGTACTTTGTAGTGGTTTATGTCCAGGAGCTAGGGCATGTGGCACTCTATGTGGTGGCTGCAGTGG
 TTAGCGTGGCTTATTTGACCTTTGTGTTCTACTTGGGTGGCAGTGTGATTGCATTGGGTCTGCTTT
 CCTGGACTGTGGACGCTCGTAAGCATCTGAAAGTCTGCTGAGCGAAGATACCAGCGGTGGCAACATT
 AAG

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR224625 representing NM_001146161
 Red=Cloning site Green=Tags(s)

MVLDPKEKMPDDGASGDHGSASLGA INPAYSNSLPHSTGDSEEPFTTYFDEKIPPEEEYSCFSFRKL
 WAFTGPGFLMSIAYLDPGNIESDLQSGAVAGFKLLWVLLLATIVGLLLQRLAARLGVVTLHLAEVCHRQ
 YPKVPRIILWLMVELAIIGSDMQEVIIGSAIAINLLSAGRVPLWGGVLTITADTFVFLFDKYGLRKLEAF
 FGFLITIMALTFGYEYITVKPSQSQVLRGMFVPSCPGCRTPQVEQAVGIVGAVIMPHNMYLHSALVKSQR
 VNRANKQEVREANKYFFIESCIALFVSFIINVFVVSVAEAFEFKTNKQVVEVCKNNSPHADLFPSDNS
 TLAVDIYKGGVVLGCYFGPAALYIWA VGILAAQSSTMTGTYSQQFVMEGFLNLKWSRFARVILTRISIAI
 IPTLLVAVFQDVEHLTGMNDFLNVLQSLQLPFALIPILTF TSLRPVMSEFSNGIGWRIAGGILVLIVCSI
 NMYFVVVYVQELGHVALYVVA AVSVAYLTFVFLGWQCLIALGLSFLDCGRSVSISKVLLSEDTSGGNI
 K

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001146161

ORF Size: 1683 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_001146161.1](#), [NP_001139633.1](#)

RefSeq Size: 4373 bp

RefSeq ORF: 1686 bp

Locus ID: 18174

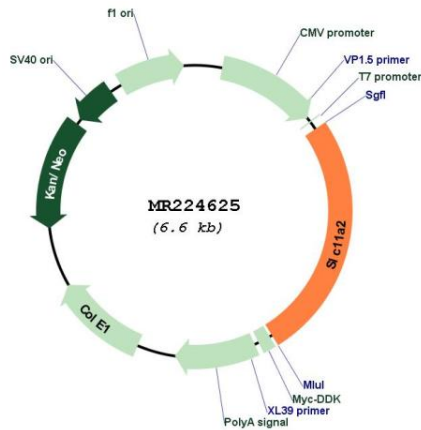
UniProt ID: [P49282](#)

Cytogenetics: 15 56.29 cM

MW: 61.9 kDa

Gene Summary: May serve to import iron into the mitochondria (By similarity). Important in metal transport, in particular iron. Involved in apical iron uptake into duodenal enterocytes. Involved in iron transport from acidified endosomes into the cytoplasm of erythroid precursor cells. May play an important role in hepatic iron accumulation and tissue iron distribution.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR224625