

Product datasheet for **MG224625**

Slc11a2 (NM_001146161) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc11a2 (NM_001146161) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Slc11a2
Synonyms:	DCT1; DMT1; mk; Nramp2; van
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG224625 representing NM_001146161
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGTGTGGATCCTAAAGAAAAGATGCCAGACGATGGCGCTTCTGGGGACCATGGAGACTCTGCCAGCC
 TTGGCGCCATCAACCCTGCCTACAGCAACTCATCCCTCCCACATTCCACTGGAGACTCTGAGGAGCCCTT
 CACCACCTACTTTGATGAGAAAAATCCCCATTCTGAGGAGGAGTACTCTTGTGTTTGTAGCTTCGTAAGCTC
 TGGGCGTTCACGGGGCCTGGCTTCTTATGAGCATTGCCTACCTAGACCCAGGAAACATCGAATCTGATT
 TGCAGTCTGGAGCAGTGGCTGGATTTAAGCTGCTCTGGGTGCTCCTTTGGCCACCATTGTGGGGCTGCT
 GCTCCAGCGCCTGCAGCGAGACTTGGAGTGGTACCAGGCTTGCATCTTGTCTGAAGTATGCACCGTCAG
 TATCCCAAGTCCACGGATCATCCTGTGGCTGATGGTGGAGTTGGCAATCATTGGTTCTGACATGCAGG
 AAGTATTGGCTCAGCCATCGCCATCAATCTCCTGTCTGCAGGAAGGGTCCCCCTGTGGGCGGAGTCTCT
 CATCACCATCGCAGACACTTTTGTGTTCTTTTTTGGACAAATATGGCTTGCAGGAACTGGAAGCGTTT
 TTTGGCTTCTCATCACTATCATGGCCCTCACGTTTGGATATGAGTACATTACAGTGAAGCCAGCCAGA
 GCCAAGTACTCAGGGCATGTTCTGTCCGCTCCTGTCCAGGGTGCCGCACCCCTCAGTGGAGCAGGCGGT
 GGGCATCGTGGGAGCTGTGATCATGCCGCAACATGTACCTGCATTCTGCCTTAGTCAAGTCTAGACAG
 GTGAATCGGGCCAATAAGCAGGAAGTGCAGGGAAGCCAATAAGTACTTCTTCATCGAGTCTGCATCGCGC
 TCTTTGTTTCTTCATCATCAATGTCTTTGTGCTGTCCGCTCTTGTCTGAAGCATTTTTGAGAAAACCAA
 CAAGCAGGTGGTTGAAGTCTGCAAAAATAACAGCAGCCCCATGCTGACCTTTTCCCAGTGACAACTCT
 ACTCTGGCTGTGGACATCTACAAAGGGGTGTTGTGCTTGGATGTTACTTCGGGCTGCAGCTCTCTACA
 TCTGGGAGTGGGATCCTGGCTGCCGGTCCAGCTCCACCATGACTGGAACCTATTCTAGCCAGTTTGT
 CATGGAGGGATTCTGAACCTAAAATGGTCGCGCTTTGCCGAGTGATCCTGACCCGGTCTATCGCCATC
 ATCCCCACCTGCTCGTCTGTCTTCCAGGATGTGGAGCACCTAACGGGGATGAATGACTTCTGAATG
 TCCTGCAGAGCTTACAGCTCCCCTTTGCTCTCATACCCATCCTCACGTTTACAAGCCTGCGGCCAGTGAT
 GAGTGAGTTTTCAATGGAATAGGCTGGAGGATTGCCGGTGGCATCCTGGTCTGATCGTCTGCTCCATC
 AACATGTACTTTGTAGTGGTTTATGTCCAGGAGCTAGGGCATGTGGCACTCTATGTGGTGGCTGCAGTGG
 TTAGCGTGGCTTATTTGACCTTTGTGTTCTACTGGGTGGCAGTGTGTTGATTGCATTGGGTCTGCTTT
 CCTGGACTGTGGACGCTCGTAAGCATCTGAAAGTCTGCTGAGCGAAGATACCAGCGGTGGAACATT
 AAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG224625 representing NM_001146161
 Red=Cloning site Green=Tags(s)

MVLDPKEKMPDDGASGDHGSASLGA INPAYSNSLPHSTGDSEEPFTTYFDEKIP IPEEYSCFSFRKL
 WAFTGPGFLMSIAYLDPGNIESDLQSGAVAGFKLLWVLLLATIVGLLLQRLAARLGVVTLHLAEVCHRQ
 YPKVPRIILWLMVELAIIGSDMQEVI GSAIAINLLSAGRVPLWGGVLIITADTFVFLFDKYGLRKLEAF
 FGLFITIMALTFGYEYITVKPSQSQVLRGMFVPSCPGCRTPQVEQAVGIVGAVIMPHNMYLHSALVKSQRQ
 VNRANKQEVREANKYFFIESCIALFVSFIINVFVSVFAEAF FEKTNKQVVEVCKNNSPHADLFPSDNS
 TLAVDIYKGGVVLGCYFGPAALYIWA VGILAAGQSSTMTGTYSQGFVMEGFLNLKWSRFARVILTRIAI
 IPTLLVAVFQDVEHLTGMNDFLNVLQSLQ LPFALIPILTFTSLRPVMSEF SNGIGWRIAGGILVLIVCSI
 NMYFVVVYVQELGHVALYVVA AVVSVAYLTFVFYLGWQCLIALGLSFLDCGRSVSISKVLLSEDTSGGNI
 K

TRTRPLE - GFP Tag - V

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

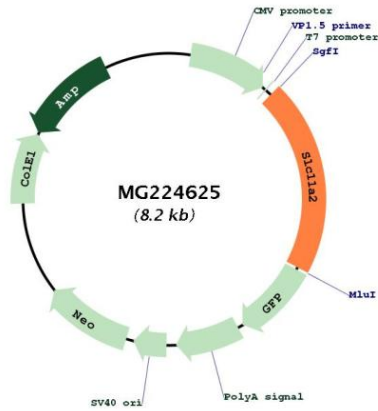
UniProt ID: [P49282](#)

Cytogenetics: 15 56.29 cM

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 MG224625