

Product datasheet for **MG216003**

Slc7a2 (NM_007514) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc7a2 (NM_007514) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Slc7a2
Synonyms:	20.5; A1158848; Atrc2; CAT-2; Cat2; Tea
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG216003 representing NM_007514
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATTCCCTGCAGAGCAGTGCTGACTTTCGCGCGATGTCTGATCCGGAGAAAAATTGTCACACTGGACA
 GCCTTGAAGATCCAAACTCTGCCGCTGCTTAACCACCGTGGACCTCATCGCTTTGGGGTTGGAAGCAC
 TCTGGGCGCTGGGGTCTACGTCCTGGCTGGGGAAGTCGCCAAAGCCGATTCTGGCCCGAGTATCGTGGTG
 TCTTCTCATCGCTGCCCTGGCCTCGGTTATGGCCGGCCTTTGCTATGCTGAATTTGGGGCCGAGTAC
 CCAAGACTGGATCTGCGTATCTATACACTTACGTACGGTCGGAGAGCTGTGGCCTTCACTACTGGCTG
 GAATCTCATCCTGTCATATGTCATAGGTACGTCCAGTGTGCAAGAGCATGGAGTGGCACCTTTGACGAA
 CTTCTTAATAACAGATTGGCCAGTTTTTCAAACGTACTTCAAATGAATTACTGGTCTGGCAGAGT
 ATCCAGACTTCTTTGCCGTGTGCCTTGTATTACTCCTGGCAGGTCTTTTATCTTTGGAGTAAAAGAGTC
 TGCTTGGGTGAATAAATTTTTACAGCTATTAATATCCTGGTCTTCTCTTTGTCATGGTGGCTGGGTTT
 GTGAAAGGAAATGTGGCTAACTGGAAGTACAGTGAAGAGTTTCTCAAAAATATATCAGCAAGTGCTAGAG
 AACCACCTTCTGAGAACGGAACAAGCATCTACGGGGCTGGCGGCTTTATGCCCTATGGCTTTACAGGGAC
 GTTGGCTGGTGTGCAACGTGCTTTTATGCCTTTGTGGGCTTTGACTGCATTGCAACAACCGGTGAAGAG
 GTTCGGAATCCACAAAAGGCGATCCCCATCGGAATAGTGACGTCCTTACTTGTCTGCTTTATGGCTTACT
 TTGGGGTTTCTGCAGCTTAAACGCTTATGATGCCTTACTACCTCCTGGATGAGAAAAGTCCACTCCCAGT
 CGCGTTTGGATATGTCAGATGGGGCCCCGCAAATACGTTGTGCGCAGCAGGCTCCCTCTGCGCCTTATCA
 ACAAGTCTTCTGGGTTCTATGTTCCCTTACCCCGAATCTGTTGCCATGGCCCGGGATGGCTTACTGT
 TTAGATTTCTTGCAAGAGTGAGTAAGAGGCAGTCACCCGTTGCTGCCACGATGACTGCAGGGGTCAATTC
 TGCTGTGATGGCCTTTCTTTTACCTGAAGGCCCTCGTGGACATGATGTCTATTGGCACCTCATGGCC
 TACTCTCTGGTGGCAGCCTGTGTCTTATTCTCAGGTACCAACCTGGCTTGTGTTACGAGCAGCCCAAAT
 ACACCCCTGAGAAAGAACTCTGGAATCATGTACCAATGCGACTTTGAAGAGCGAGTCCCAGGTCACCAT
 GCTGCAAGGACAGGGTTTACGCTACGAACCTCTTACGCCCTCTGCCCTGCCACACGACAGTCGGCT
 TCCCTTGTGAGCTTTCTGGTGGGATTCTGGCTTCTCATCCTGGGCTTGAATTTCTAACACGTATG
 GCGTCCAGGCCATTGCCAGACTGGAAGCCTGGAGCCTGGCTCTTCTCGCCCTGTTCTTGTCTCTGCGC
 TGCCGTCATTCTGACCATTTGGAGGCAGCCACAGAATCAGCAAAAAGTAGCCTTCATGGTCCCGTTCTTA
 CCGTTTCTGCCGCTTACGATCCTGGTCAACATTTACTTGATGGTCCAGTTAAGTGGGACACTTGGGA
 TCAGATTCAGCATCTGGATGGCGCTTGGCTTTCTGATCTATTTCCGCTATGGCATTAGACACAGCTTGGGA
 GGGTAACCCAGGGACGAAGAAGACGATGAGGATGCCTTTTCAAAAACATCAATGTAGCAACAGAAGAA
 AAGTCCGTCATGCAAGCAATGACCATACCAAAGAAACCTCAGCTTACCTTTCATACTTTCATGAAAAGA
 CAAGTGAATGT

ACGCGTACGCGGGCCGCTCGAG – GFP Tag – GTTTAA

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_007514

ORF Size: 1971 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_007514.1](#)

RefSeq Size: 7731 bp

RefSeq ORF: 1974 bp

Locus ID: 11988

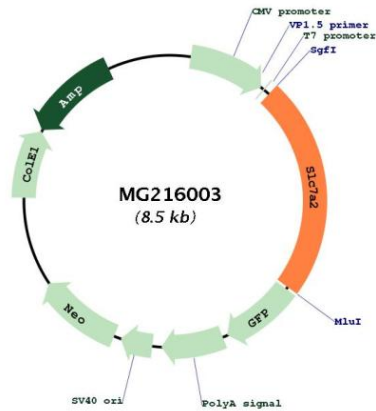
UniProt ID: [P18581](#)

Cytogenetics: 8 23.89 cM

Gene Summary:

Isoform 1 functions as low-affinity, high capacity permease involved in the transport of the cationic amino acids (arginine, lysine and ornithine). Isoform 2 also functions as permease that mediates the transport of the cationic amino acids (arginine, lysine and ornithine), but it has much higher affinity for arginine than isoform 1. May play a role in classical or alternative activation of macrophages via its role in arginine transport.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG216003