

Product datasheet for **MC220148**

Slc7a2 (NM_001044740) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc7a2 (NM_001044740) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Slc7a2
Synonyms:	20.5; A1158848; Atrc2; CAT-2; Cat2; Tea
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC220148 representing NM_001044740
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGATTCCCTGCAGAGCAGTGCTGACTTTCGCGCGATGTCTGATCCGGAGAAAAATTGTCACACTGGACA
 GCCTTGAAGATCCAAACTCTGCCGCTGCTTAACCACCGTGGACCTCATCGCTTTGGGGTTGGAAGCAC
 TCTGGGCGCTGGGTCTACGTCCTGGCTGGGGAAGTCGCCAAAGCCGATTCTGGCCCGAGTATCGTGGTG
 TCTTCTCATCGCTGCCCTGGCCTCGGTTATGGCCGGCCTTTGCTATGCTGAATTTGGGCCCCGAGTAC
 CCAAGACTGGATCTGCGTATCTATACACTTACGTACGGTCCGAGAGCTGTGGCCTTCACTGGCTG
 GAATCTCATCCTGTCATATGTCATAGGTACGTCCAGTGTGCAAGAGCATGGAGTGGCACCTTCGACGAA
 CTTCTTAATAACAGATTGGCCAGTTTTTCAAACGTAATCAAATGAATTACTGGTCTGGCAGAGT
 ATCCAGACTTCTTGGCGTGTGCCTTGATTACTCCTGGCAGGCTTTTATCTTTGGAGTAAAAGAGTC
 TGCTTGGGTGAATAAATTTTTACAGCTATTAATCCTGGTCTCTCTTTGTCATGGTGGCTGGGTTT
 GTGAAAGGAAATGTGGCTAACTGGAAGATCAGTGAAGAGTTTCTCAAAAATATATCAGCAAGTGCCAGAG
 AACCACCTTCTGAGAACGGAACAAGCATCTACGGGGCTGGCGGCTTTATGCCCTATGGCTTTACAGGGAC
 GTTGGCTGGTGTGCAACGTGCTTTATGCCTTTGTGGGCTTTGACTGCATTGCAACAACGGGTGAAGAG
 GTTCGGAATCCGCAAAAGGCGATCCCATCGGAAATAGTGACGTCCTTACTTGTCTGCTTTATGGCTTACT
 TTGGGGTTTCTGCAGCTTAAACGCTTATGATGCCTTACTACCTCCTGGATGAGAAAAGTCCACTCCCGGT
 CGCGTTTGGATATGTCAGATGGAGCCCCGCAAAATATGTTGTCTCGGCAGGCTCCCTCTGCGCCTTATCA
 ACAAGTCTTCTGGATCCATTTCCCAATGCCTCGTGAATCTATGCTATGGCGGAGGATGGGTTGCTTT
 TCAAATGTCTAGCTCAAATCAATTCAAAACGAAGACACCAAGTAAATGCTACTTTGTCGCGGTGCAGT
 GGCAGCTGTGATGGCCTTCTTTTTGACCTGAAGGCCCTCGTGGACATGATGTCTATTGGCACCCCTCATG
 GCCTACTCTCTGGTGGCAGCCTGTGTGCTTATTCTCAGGTACCAACCTGGCTTGTGTTATGACCAGCCCA
 AATACACCCTGAGAAAGAACTCTGGAATCATGTACCAATGCGACTTTGAAGAGCGAGTCCAGGTACAC
 CATGCTGCAAGGACAGGGTTTCAGCCTACGAACCCTTTCAGCCCTCTGCCCTGCCACACGACAGTCG
 GCTTCCCTTGTGAGCTTCTGGTGGGATTCTGGCTTTCCTCATCCTGGGCTTGAATTTCAACCAGT
 ATGGCGTCCAGGCCATTGCCAGACTGGAAGCCTGGAGCCTGGCTCTTCTCGCCCTGTTCTTGTCTCTG
 CGTTGCCGTATTCTGACCATTTGGAGGACCCACAGAATCAGCAAAAAGTAGCCTTATGGTCCCGTTC
 TTACCCTTCTGCCGGCCTTTCAGCATCCTGGTCAACATTTACTTGATGGTCCAGTAAAGTCCGACACTT
 GGATCAGATTGATCAGTCTGGATGGCGCTTGGCTTCTGATCTACTTCGCCTATGGCATTAGACACAGCTT
 GGAGGGTAACCCAGGGATGAAGAAGACGATGAGGATGCCTTTTCAGACAACATCAATGCAGCAACAGAA
 GAAAAGTCCGCCATGCAAGCAAATGACCATCACCAAGAAACCTCAGCTTACCTTTCATACTTATGAAA
 AGACAAGTGAATGTTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001044740
- Insert Size:** 1977 bp
- OTI Disclaimer:** 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).
- 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_001044740.2](#), [NP_001038205.1](#)

RefSeq Size: 7720 bp

RefSeq ORF: 1977 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] Transcript Variant: This variant (2) uses an alternate exon in the coding region compared to variant 1. The resulting protein (isoform 2) is longer but has the same N- and C-termini compared to isoform 1. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.