

Product datasheet for **MC219024**

Slc38a9 (NM_178746) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	Slc38a9
Synonyms:	4833412L08Rik; 6720411P22Rik; 9130023D20Rik; 9430067K09Rik; A730092C09
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



Fully Sequenced ORF:	>MC219024 representing NM_178746 Red=Cloning site Blue=ORF Orange=Stop codon TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCCGGATCGCC ATGGCAAGTGTGGATGGTATTCCAGGCATCTTCTCTGAGGTGGAACATGAAGTAAGCCCTGGGCCTA TGAACATCCAGTTTGATTCATCAGATCTGAGATCTAAAAGGCCTTTCTATATAGAGCCTACCAACATTGT CAATGTGAATGATGTCATTAGAGGGTTAGTGACCATGCTGCTGCTATGAACAAGCGGATTCATTACTAC AGCCGGCTCACCCTCTGCAGACAAGGCACTGATTGCTCCAGACCATGTCGTCCTGCTCCAGAGGAAT GCTATGTGTATAGTCCATTGGGCTCTGCCTATAAACTCAAGAGTTACACTGAAGGCTATGGTAAAAACAC CAGCTTAGTTACTATTTTATGATTTGGAATACCATGATGGGAACATCTATACTAAGTATTCCTTGGGGC ATAAAACAGGCTGGATTACCACTGGGATGTGTGTCATCGTCTGATGGGCCTTCTAACACTTTACTGCT GCTATAGAGTGGTGAAGTCACGGAGTACGATAAGTACATCGGACACGAGTACCTGGGAATATCCAGATGT CTGCAACATTATTTGGCTCCTTTGGGCAATGGTCAAGTCTCCTTTTCTCCTTGGTGTGCTCATTGGA GCAATGATAGTTTATTGGGTGCTTATGTCTAATTTCTTTTAACTGGAAAGTTTATTTTAAATTTTA TTCATCACATTAATGACACAGACACTGTACTGAGCACCAATAATAGCAACCTGTGATATGCCAAATGC TGGCAGTGGTGGCCGCTCTGACAACAGTTCATGATTTTCTACAACAACAACAGAGTGACAGCTGTTT GAGAAGTGGTGGGACAAGTCCAGGACAGTGCCCTTCTACCTATAGGGCTCCTCTTGCCGCTGCTCAACT TCAAGTCTCCTTCATTCTTCTCCAAATTTAATATCCTGGGAACGGTGTCTGTCTCTATTTTGATTTTCGT TGTTACCCTGAAGGCTGTTGCTTAGGATTCCATCTGGAATTTCACTGGTTTGTGCCAACAGAAATTTT GTACCAGAGATAAGAGCTCAGTTTCCGACGCTGATGGGGTCTTACTCTGGCCTTCTTTATTACAACCT GCATCATCACACTCTTGAACCAACAAGAACAAGAAATAATGTGAGAGACCTATGCATTGCTTATAT GCTGGTGACATTGACTTATCTCTATATTGGTATCCTGGTTTTTGCCTCATTCCCTTCGCCTCCATTACCC AAAGATTGTATTGAACAGAACTTCTTAGACAACCTCCCGCAGTACATCCTGTCTTCATTGCAAGGA TATTCCTGCTGTTCCAGATGATGACTGTATATCCGCTCTTAGGCTACTTGGCTCGTGTCCAGCTCTTGGG CCATATCTTCGGTGACATTTATCCTAGCATTTCATGTGCTGATTCTTAACCTAGTTATTGTGGGAGCT GGAGTGACCATGGCCTGTTTCTACCCAAACATAGGAGGGATCATAAGGTATTCGGGAGCAGCATGCGGCC TGGCTTTCTGTTCATATACCGTCTCTCATCTATAATCTCCCTTACCAAGAGGAGCGTCTGACATG GCCTAAGTTGGTGTTCACGTTATCATCATCATTTTGGGCCTGGCGAACCTGATTGCTCAGTTTTTCATG TGA ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Restriction Sites:	SgfI-MluI
ACCN:	NM_178746
Insert Size:	1683 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_178746.4, NP_848861.1</u>
RefSeq Size:	8913 bp
RefSeq ORF:	1683 bp
Locus ID:	268706
UniProt ID:	<u>Q8BGD6</u>
Cytogenetics:	13 D2.2
Gene Summary:	Lysosomal amino acid transporter involved in the activation of mTORC1 in response to amino acid levels. Probably acts as an amino acid sensor of the Rag GTPases and Ragulator complexes, 2 complexes involved in amino acid sensing and activation of mTORC1, a signaling complex promoting cell growth in response to growth factors, energy levels, and amino acids. Following activation by amino acids, the Ragulator and Rag GTPases function as a scaffold recruiting mTORC1 to lysosomes where it is in turn activated. SLC38A9 mediates transport of amino acids with low capacity and specificity with a slight preference for polar amino acids. Acts as an arginine sensor. Following activation by arginine binding, mediates transport of leucine, tyrosine and phenylalanine with high efficiency, and is required for the efficient utilization of these amino acids after lysosomal protein degradation.[UniProtKB/Swiss-Prot Function]