

Product datasheet for **RN207681**

Slc38a9 (NM_001035251) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc38a9 (NM_001035251) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Slc38a9
Synonyms:	RGD1311881
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >RN207681 representing NM_001035251
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGCAAACGTGGATAGTGAAGTCTAGGCATCTTATCTCTGAGGTAGAACATGAAGTGAATCCCGGACCTA
 TGAATATCCAGTTTGACTCCTCAGACCTAAGATCTAAAAGGCCTTTCTATATAGAGCCTACCAACATCGT
 CAATGTGAATGATGTCATTGAGAGGTGAGCGACCATGCTGCTGCTATGAACAAGCGGATTCATTACTAC
 AGCCGGCTCACCCTCTGCAGACAAGGCACTGATTGCTCCAGACCAGTAGTTCCTGCTCCAGAGGAAT
 GCTATGTGTACAGTCCATTGGGCTCTGCCTATAAACTTAAGAGTTACACTGAAGGCTATCGTAAAAACAC
 CAGCTTAGTTACTATTTTATGATCTGGAATACCATGATGGGGACATCTATACTAAGTATTCCTGGGGC
 AAAAAACAGGCTGGATTTACTACTGGGATGTGTGTCATCGTCTGATGGGCCTTCTAACCTTTACTGCT
 GCTATAGAGTGGTGAAGTCCCGGAGTATGATAGTTACATCGGACACAACCTACCTGGGAATATCCAGATGT
 CTGCAACATTACTTTGGCTCTTTTGGCAATGGTCAAGTCTCCTTTCTCCTTGGTGTCTCTCATTGGA
 GCAATGATAGTTTATTGGGTGCTTATGTCTAATTTCTTTTAACTGGAAAGTTATTTTAAATTTTA
 TTCATCACATTAATGACACAGACACTGACTGAGCACCAATAATAGCAGCCCTGTGATCTGTCCAAGCGC
 CGGGAGTGGCCATCCTGACAACAGCTCCATGATCTTCTACAACAGTGACACGGAGGTGCGGCTGTTTGAG
 AGGTGGTGGGACAAGTCCAAGACAGTGCCCTTCTACCTTATAGGGCTCCTCTTGCCGCTGCTCAACTTCA
 AGTCTCCTTCGTTCTTCTCCAAATTTAATATCCTGGGTACGGTATCTGTCTCTATTTGATTTTCATTGT
 TACCCTGAAGGCTATTCGCTTAGGATTCATCTGGAATTTCACTGGTTTGCGCAACAGAATTTTGTGTA
 CCAGAGATAAGAGCTCAGTTTCCACAGCTGACAGGGGTGCTTACTCTGGCCTTCTTTATTCACAATTGTA
 TCATCACACTCTTGAAAAACAACAAGAACAAGAAATAATGTGAGAGACCTGTGCATTGCTTATATGCT
 GGTGACATTGACCTATCTCTATATTGGTGTCTGCTGTTTGGCTCATTCCCTTCACCTCCATTACCCAAA
 GATTGTATTGAACAGAATTCTTGGACAATTCCCCAGCAGTGACACCCTGTCTTCATTGCACGGATAT
 GCCTGCTCTTCCAGATGATGACTGTGTACCCACTCTTAGGCTACTTGGCTCGCGTTCAGCTCCTGGGCCA
 TATCTTCGGTGACATTTATCCTAGCATTTTCCATGTGCTGATTCTTAACCTAATTATCGTGGGTGCTGGA
 GTGACCATGGCCTGTTTCTACCCAAACATAGGAGGGATCATAAGGTACTCGGGAGCAGCGTGGCGCTGG
 CTTTCGTGTTTATATACCTTCTCTCATCTATATACTCTCCAGCACCAAGAGGAGCGTCTGACATGGCC
 TAAGTTAGTGTTCACATCATCATCATCTTTGGGCTGGCGAACCTGATTGCTCAGTTTTTCATG**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-MluI

ACCN: NM_001035251

Insert Size: 1680 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:	<u>NM_001035251.1, NP_001030328.1</u>
RefSeq Size:	1807 bp
RefSeq ORF:	1680 bp
Locus ID:	310091
UniProt ID:	<u>Q3B8Q3</u>
Cytogenetics:	2q14
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]