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Product datasheet for SC314011

SLC38A9 (NM_173514) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	SLC38A9
Synonyms:	URLC11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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Fully Sequenced ORF:

>SC314011 representing NM_173514.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCAAATATGAATAGTGATTCTAGGCATCTTGGCACCTCTGAGGTAGATCATGAAAGAGATCCTGGA
CCTATGAATATCCAGTTTGAGCCATCGGATCTAAGATCCAAAAGGCCTTTCTGTATAGAGCCCACAAAC
ATCGTGAATGTGAATCATGTCATTCAGAGGGTTAGTGACCATGCCTCTGCCATGAACAAGAGAATTCAT
TACTACAGCCGGCTCACCACTCCTGCAGACAAGGCACTGATTGCCCCAGACCATGTAGTTCCAGCTCCA
GAAGAGTGCTATGTGTATAGTCCATTGGGCTCTGCTTATAAACTTCAAAGTTACACTGAAGGATACGGT
AAAAACACCAGTTTAGTAACCATTTTTATGATTTGGAATACCATGATGGGAACATCTATACTAAGCATT
CCTTGGGGCATAAAACAGGCTGGATTTACTACTGGAATGTGTGTCATCATACTGATGGGCCTTTTAACA
CTTTATTGCTGCTACAGAGTAGTGAAATCACGGACTATGATGTTTTCGTTGGATACCACTAGCTGGGAA
TATCCAGATGTCTGCAGACATTATTTCGGCTCCTTTGGGCAGTGGTCGAGTCTCCTTTTCTCCTTGGTG
TCTCTCATTGGAGCAATGATAGTTTATTGGGTGCTTATGTCAAATTTTCTTTTTAATACTGGAAAGTTT
ATTTTTAATTTTATTCATCACATTAATGACACAGACACTATACTGAGTACCAATAATAGCAACCCTGTG
ATTTGTCCAAGTGCCGGGAGTGGAGGCCATCCTGACAACAGCTCTATGATTTTCTATGCCAATGACACA
GGAGCCCAACAGTTTGAAAAGTGGTGGGATAAGTCCAGGACAGTCCCCTTTTATCTTGTAGGGCTCCTC
CTCCCACTGCTCAATTTCAAGTCTCCTTCATTTTTTTCAAAATTTAATATCCTAGGCACAGTGTCTGTC
CTTTATTTGATTTTCCTTGTCACCTTTAAGGCTGTTCGCTTGGGATTTCATTTGGAATTTCATTGGTTT
ATACCAACAGAATTTTTTGTACCAGAGATAAGATTTCAGTTTCCACAGCTGACTGGAGTGCTTACCCTT
GCTTTTTTTATTCATAATTGTATCATCACACTCTTGAAGAACAACAAGAAACAAGAAAACAATGTGAGG
GACTTGTGCATTGCTTATATGCTGGTGACATTAACTTATCTCTATATTGGAGTCCTGGTTTTTGCTTCA
TTTCCTTCACCACCATTATCCAAAGATTGTATTGAGCAGAATTTTTTAGACAACTTCCCTAGCAGTGAC
ACCCTGTCCTTCATTGCAAGGATATTCCTGCTGTTCCAGATGATGACTGTATACCCACTCTTAGGCTAC
CTGGCTCGTGTCCAGCTTTTGGGCCATATCTTCGGTGACATTTATCCTAGCATTTTCCATGTGCTGATT
CTTAATCTAATTATTGTGGGAGCTGGAGTGATCATGGCCTGTTTCTACCCAAACATAGGAGGGATCATA
AGATATTCAGGAGCAGCATGTGGACTGGCCTTTGTATTCATATACCCATCTCTCATCTATATAATTTCC
CTCCACCAAGAAGAGCGTCTGACATGGCCTAAATTAATCTTCCACGTTTTCATCATCATTTTGGGCGTG
GCTAACCTGATTGTTCAGTTTTTTATGTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI

ACCN: NM_173514

Insert Size: 1686 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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:	NM_173514.3
RefSeq Size:	2543 bp
RefSeq ORF:	1686 bp
Locus ID:	153129
UniProt ID:	Q8NBW4
Cytogenetics:	5q11.2
Domains:	Aa_trans
Protein Families:	Transmembrane
MW:	63.8 kDa
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 (PubMed:25561175, PubMed:25567906, PubMed:29053970). 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 (PubMed:25561175, PubMed:25567906). Acts as an arginine sensor (PubMed:25567906, PubMed:29053970). 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 (PubMed:29053970).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (1) encodes the longest isoform (1). Variants 1 6, 7 and 8 encode the same isoform (1).