

Product datasheet for **SC324682**

SLC7A6 (NM_001076785) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC7A6 (NM_001076785) Human Untagged Clone
Tag:	Tag Free
Symbol:	SLC7A6
Synonyms:	LAT-2; LAT3; y+LAT-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001076785.1
CGCCGGGCACTGGGAGAGTTTATGTGGCCGAGGCAGACAAGTGGAAATTAGGCCCTTGCTG
CAGGGGACTTCATTTCTCTCAGTACTGGACCCATTTATGAGGAGGTGGCTTATGAAAG
TGTGATGTTTCGCGTATTTCTTGACAGGCCACAGCAAACACAGGTGTGCAGGAACCGTTTG
TCATGGAAGCCAGGGAGCCTGGGAGGCCACACCCACCTACCATCTTGTCCCTAACACCA
GCCAGTCCAGGTGGAAGAAGATGTCAGCTCGCCACCTCAAAGGTCTCCGAAACTATGC
AGCTGAAGAAGGAGATCTCCCTGCTGAATGGGGTCAGCCTGGTGGTGGGCAACATGATCG
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CACTGATTGTGTGGGCCATTGGTGGCTCTTCTGTTGTGGGTGCCCTTGTATGCGAG
AGCTGGGGACCACCATCACCAAGTGGGAGCCAGCTACGCTTATATTCTAGAGGCCCTTG
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TCAAAAACCCAGAAAGAAATTTGCCCTTGCCATTGGGATTTCTATGCCAATTGTGACGC
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ACATTGAGCGTTTTACACCTATCCCTGCTTACTGTTCAATTGCACCATGGCACTCATCT
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GGCCTCTCAAGCTGAGCGTGTGTTTTCCCATCGTGTCTGCATATGCTCCGTGTTTCTGG
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ATAAGGGAAATAACCTTGGCCATATATTTGCTCAATAAAGATTGAAGGAAGCATGGAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAA
    
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- Restriction Sites:** Please inquire
- ACCN:** NM_001076785
- 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.

RefSeq: [NM_001076785.1](#), [NP_001070253.1](#)

RefSeq Size: 6362 bp

RefSeq ORF: 1548 bp

Locus ID: 9057

UniProt ID: [Q92536](#)

Cytogenetics: 16q22.1

Protein Families: Druggable Genome, Transmembrane

Gene Summary: Involved in the sodium-independent uptake of dibasic amino acids and sodium-dependent uptake of some neutral amino acids. Requires coexpression with SLC3A2/4F2hc to mediate the uptake of arginine, leucine and glutamine. Also acts as an arginine/glutamine exchanger, following an antiport mechanism for amino acid transport, influencing arginine release in exchange for extracellular amino acids. Plays a role in nitric oxide synthesis in human umbilical vein endothelial cells (HUVECs) via transport of L-arginine. Involved in the transport of L-arginine in monocytes. Reduces uptake of ornithine in retinal pigment epithelial (RPE) cells.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript. Variants 1 and 2 encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.