

Product datasheet for **SC108367**

SLC38A2 (NM_018976) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC38A2 (NM_018976) Human Untagged Clone
Tag:	Tag Free
Symbol:	SLC38A2
Synonyms:	ATA2; PRO1068; SAT2; SNAT2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC108367 sequence for NM_018976 edited (data generated by NextGen Sequencing)

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ATGAAGAAGGCCGAAATGGGACGATTTCAGTATTTCCCGGATGAAGACAGCAGCAGCTAC
AGTTCCAACAGCGACTTCACTACTCTACCCACCAAGCAAGCTGCTCTGAAAAGCCAT
TATGCAGATGTAGATCCTGAAAACCAAGCACTTTTACTTGAATCGAATTTGGGGAAGAAG
AAGTATGAAACAGAATTTTCATCCAGGTACTACTCTTTTGAATGTCAGTATTTAATCTG
AGCAATGCGATTGTGGCAGTGGAAATCCTTGGGCTTTCTTATGCCATGGCTAATACTGGA
ATTGCTCTTTTATAAATCTCTTGACATTGTGTCAATATTTCCCTGTATTCTGTTTCT
CTCCTTTTGAAGACTGCCAATGAAGGAGGCTTTATTATATGAACAATTGGGATATAAG
GCATTTGGATTAGTTGGAAGCTTGCAGCATCTGGATCAATTACAATGCAGAACATTGGA
GCTATGTCAAGCTACCTCTTCATAGTGAATATGAGTTGCCTTTGGTGATCCAGGCATTA
ACGAACATTGAAGATAAACTGGATTGTGGTATCTGAACGGGAATTTGGTTCTGTTG
GTGTCATTGGTGGTCATTCTTCTTTGTCGCTGTTAGAAATTTAGGATATTTGGGATAT
ACCAAGTGGCCTTTCTTGTGTGTATGGTGTCTTTCTGATTGTGGTCATTGCAAGAAA
TTTCAGGTTCCGTGCTGTGGAAGCTGCTTTGATAATTAACGAAACAATAAACACCACC
TTAACACAGCCACAGCTCTTGTACCTGCTTTGTACATAACGTGACTGAAAATGACTCT
TGCAGACCTCACTATTTATTTCAACTCACAGCTGTCTATGCTGTGCCAATTCGTATC
TTTTCATTTGTCTGTCATCCTGCTGTTCTTCCCATCTATGAAGAACTGAAAGACCGCAGC
CGTAGAAGAATGATGAATGTGTCCAAGATTTTCAATTTTGTCTATGTTTCTCATGTATCTG
CTTGCCGCCCTCTTTGGATACCTAACATTTTACGAACATGTTGAGTCAGAATTGCTTCAT
ACCTACTCTTCTATCTTGGGAATGATATCTTCTTCTCATTGTCGCTGGCTGTGTTA
ATGGCTGTGACCTGACAGTACCAGTAGTATTTTCCCAATCCGGAGTTCTGTAACCTCAC
TTGTTGTGTGCATCAAAAGATTTTCAAGTTGGTGGCGTCATAGTCTCATTACAGTGTCTATC
TTGGCATTACCAATTTACTTGTCTATCTTGTCCCAACTATTAGGGATATCTTTGGTTTT
ATTGGTGCATCTGCAGCTTCTATGTTGATTTTTATTCTTCTCTGCTTCTATATCAAG
TTGGTGAAGAAAGAACCTATGAAATCTGTACAAAAGATTGGGGCTTTGTTCTTCTGTGA
AGTGGTGTACTGGTGATGACCGGAAGCATGGCCTTGATTGTTTTGGATTGGGTACACAAT
GCACCTGGAGGTGGCCATTAA
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Clone variation with respect to NM_018976.4

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_018976 unedited

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CGTTTCAATTTTGTAAACACGACTTCACTATAGGGCGGCACGCGCAATTCGGCACGAGGCG
CCGCCGCCCTTAGAACGCCCTTCCAGTACTGCTAGCAGCAGCCGACCACGCGTTACCGCA
CGCTCGCGCCTTTCCCTTGACACGGCGGACGCCGAGGATTGGGGCGCAATTTGTCTTT
TCCTTTTTTATTAATAATTTTCTTCTGCTGTTGTTGGATTGGGGAATTTTTGTTT
GTTTTTTATGATTTGTATTTGACTGAGAGAAACCACTGAAGACGTCTGCGTGAGAATAG
AGACCACCGAGGCCGACTCGCGGGCCGCTGCACCCACCGCCAAGGACAAAAGGAGGCCAG
CGCTACTAGCTGCACCCGATTCTCCCACTGCTTATCATGAAGAAGGCCGAAATGGGACG
ATTCAGTATTTCCCGGATGAAGACAGCAGCAGCTACAGTTCCAACAGCGACTTCAACTA
CTCCTACCCACCAAGCAAGCTGCTCTGAAAAGCCATTATGCAGATGTAGATCCTGAAAA
CCAGAATTTTACTTGAATCGAATTTGGGGAAGAAGAAGTATGAAACAGAATTTTCATCC
AGGTACTACTTCTTTGGAATGTCAGTATTTAATCTGAGCAATGCGATTGTGGGCAGTGG
AATCCTTGGGCTTTCTTATGCCATGGCTAATACTGGAATTGCTCTTTTATAATTCTCTT
GACATTTGTGTCAATATTTCCCTGTATTCTGTTCTCTCTTTTGAAGACTGCCAATGA
AGGATGGTCTTTATTATATGAACAATTGNGATATAAAGCATTGGATTAGTTGGNAAGCT
TGCAGCATCTGGATCAATTACATGCAGAACATTGGAGCTATGTCAAGCTACCTCNCATA
GTGAAATATGAGTTTGCCTTGGTGATCCAGCATTAACTGAGATANACTGGATT
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_018976 unedited <pre>GGCATGGCAACTTCCAGGTCCAGAAGNGGCACTGGGNGGGGTACAGGGATGCCACCCG GGATCTGTTTCAGGAAACAGCTATGACCGCGGCCGAATCTAGAGNCGAGNNTTTTTTTT TTTTTTTTTTTTTTTTTTTTCAGGATTAAGCATGTATTTATTTAGTTCAGTTAAACAA ACATACATTGTTTCATTGAAACGGGGTAGCACTTTTGCCAACAAGCCATACTAAATTTG TGGGCTTTAACAGTACAGGGGGGATATTACACTATATACACAAAGTTAATACCCCGAG GTTCTCAAAGGTCTTCCATTACACTAGATCACATTTTATTTTATTACACTAAATCACATT TTGATTACTGCATTTGGAAAATGTATTCTTATTTAAATTTTAAATAAGAGATCTGAATT TGTACCAAGATTTTCATGAAAAAATTGGATGTTGTTTATTGCAAAATACATTTAAAAACAAGT TTTTTTTAGGGTTTGTACACAATTTGACAATTTTCAATATTCAATTTTCTGTACAGGTC CTTTTGGGACATTTCTTATAGTTACATAATGTGAATTCATCAAAATGCGAGTAAGAACT TACAGGATTTTATACCTGGAACCCAAACCCAAACCTGACATTATATACAACCTATTTA CAAATACATTTGGACAGACATTATTTGTACCTAGATTATCAAAAAATATTGAAAAATAGG TTAGCCTATAATGGATTAATGGTTGTTCTATAAAAAACATTACCAGTGGAAGTGAACAT CCCCGGAAGACAGTATTGCAAAATGGAGGTGACAAGAACGGGGTTTATCCTGAAAACCTGT TATTAATGGAACCTTTGGTCAGAACCTAAGGTAAAAAAAACCC</pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_018976
Insert Size:	5000 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_018976.3</u> , <u>NP_061849.2</u>
RefSeq Size:	4861 bp
RefSeq ORF:	1521 bp
Locus ID:	54407
UniProt ID:	<u>Q96QD8</u>
Cytogenetics:	12q13.11
Domains:	Aa_trans
Protein Families:	Druggable Genome, Transmembrane

Gene Summary:

Functions as a sodium-dependent amino acid transporter. Mediates the saturable, pH-sensitive and electrogenic cotransport of neutral amino acids and sodium ions with a stoichiometry of 1:1. May function in the transport of amino acids at the blood-brain barrier and in the supply of maternal nutrients to the fetus through the placenta.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).