

Product datasheet for **SC324472**

Solute carrier family 22 member 5 (SLC22A5) (NM_003060) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Solute carrier family 22 member 5 (SLC22A5) (NM_003060) Human Untagged Clone
Tag:	Tag Free
Symbol:	Solute carrier family 22 member 5
Synonyms:	CDSP; OCTN2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene sequence for NM_003060.2
CCGCGGCAGGACCAAGGCGGGTGTGTCAGCTCGCGAGCCTACCCTCCGCGGACGGTCTTG
GGTCGCCTGTGCCTGGCTTGCCTGGTGGCGGGGGTGCCTCCGCGGCACGCGCAAAGC
CCGCCGCTTCCCGACCCAGGCGCGCTCTGTGGGCTCTGAGGGCGGCATGCGGGAC
TACGACGAGGTGACCGCTTCTGGGCGAGTGGGGCCCTCCAGCGCCTCATCTTCTTC
CTGTCTAGCGCCAGCATCATCCCAATGGCTTACCAGCCTGTCTCCGTGTTCTGTGATA
GCGACCCGAGACCGCTGCCGGGTGCCGGACGCCGCAACCTGAGCAGCGCCTGGCG
AACACACTGTCCACTGCGGCTGCGGGACGGCGGAGGTGCCCCACAGCTGCCGCCGC
TACCGGCTCGCCACCATCGCAACTTCTCGGCGCTTGGGCTGGAGCCGGGGCGGACGTC
GACCTGGGGCAGCTGGAGCAGGAGAGCTGTCCGGATGGCTGGGAGTTCAGTCAGGACGTC
TACCTGTCCACCATTGTGACCGAGTGGAACTGGTGTGTGAGGACGACTGGAAGGCCCA
CTACAATCTCCTTGTCTTCTGGGTGTGCTGTGGGCTCCTTCATTTACAGGCGAGCTG
TCAGACAGGTTTGGCCGGAAGAATGTGCTGTTCTGTGACCATGGGCATGCAGACAGGCTTC
AGTTCCTGCAGATCTTCTGAAGAATTTTGTGATGTTTGTGCTGCTGTTTGTCTTGTGA
GGCATGGGCCAGATCTCCAATATGTGGCAGCATTGTCTGGGACAGAAATTTTGGC
AAGTCAGTTTCGATAAATATTCTTACGTTAGGAGTGTGCATATTTTATGCATTTGGCTAC
ATGGTGTGTCACCTGTTTGTACTTTCATCCGAGACTGGCGGATGCTGCTGGTGGCGCTG
ACGATGCCGGGGGTGCTATGCGTGGCACTCTGGTGGTTCATCCCTGAGTCCCCCGATGG
CTCATCTCTCAGGGACGATTTGAAGAGGAGAGGTGATCATCCGCAAGGCTGCCAAAGCC
AATGGGATTGTTGTGCCTTCCACTATCTTTGACCCGAGTGAAGTACAAGACCTAAGTTCC
AAGAAGCAGCAGTCCACAACATTTGGATCTGCTTGAACCTGGAATATCCGGATGGTC
ACCATCATGTCCATAATGCTGTGGATGACCATATCAGTGGGCTATTTTGGGCTTTCGCTT
GATACCTCAACTTGCATGGGGACATCTTGTGAACCTGCTTCTTTTCCAGCGATGGTTGAA
GTCCAGCATATGTGTTGGCCTGGCTGCTGCAATATTTGCCCGGCGCTATTCCATG
GCCACTGCCCTCTTCTGGGTGGCAGTGTCTTCTTTCATGCAGCTGGTACCCCGAGC
TTGTATTTTGGCTACAGTCTGGTGTGTTGGGCAAGTTTGGAGTACAGGCTGCCTTT
TCCATGGTCTACGTGTACACAGCCGAGCTGTATCCACAGTGGTGAAGAACATGGGTGTG
GGAGTCACTCCACAGCATCCCGCTGGGACGATCCTGTCTCCCTACTTCTGTTTACCTT
GGTGCCTACGACCGCTTCTGCCCTACATTCTCATGGGAAGTCTGACCATCCTGACAGCC
ATCCTCACCTTGTCTCCAGAGAGCTTCCGTACCCACTCCCAGACACCATTGACCAG
ATGCTAAGAGTCAAAGGAATGAAACACAGAAAACTCCAAGTACACAAGGATGTTAAAA
GATGGTCAAGAAAGGCCACAATCCTTAAAAGCACAGCCTTCTAACATCGCTTCCAGTAA
GGGAGAAACTGAAGAGGAAAGACTGTCTTGCCAGAAATGGCCAGCTTGTGACAGCTCCGA
GTCCTTACAGTGAAGGCTTTGCTGTTTGCCTCTTACCTGTGTGACTTGTCTCTCT
GGATGGGCACCCACACTCAGAGGCTACATATGGCCCTAGAGCACCACCTTCTCTAGGGA
CACTGGGGCTACCTACAGACAATTCATCTAAGTCTAATTTACAATGATGGACTCAG
CACCTCCAAAGCAGTTAATTTTTACTAGAACCAGTGAAGTCTGGAGGAATGTGAGAAGC
ATATGCTAAATGTACATTTTAAATTTAGACTACTTGAAAAGGCCCTAATAAGGCTAGAG
GTCTAAGTCCCCACCCCTTCCCACTCCCTCTAGTGGTGAACCTTGAAGGAAAAGGA
AGTAATTGCACAAGGAGTTTGATTCTTACCTTTTCTCAGTTACAGAGGACATTAAGTGA
TCATTGCTTCCCAAGGAGGAGAGCGCAGAGCTAGGAAAGTGAAGGTAATGAAGATG
GAGCAGAAATGAGCAGATGCAGATCACCAGCAAAGTGAAGTGTGAGCTCTTAAAGC
CACTCAGCATGACGACTGAGTAGACTTGTTTACATCTGATCAAAGCACTGGGCTTGTCCA
GGCTCATAATAAATGCTCCATTGAATCTACTATTCTTGTTTTCCACTGCTGTGAAACCT
CCTTGCTACTATAGCGTCTTATGTATGGTTTAAAGGAAATTTATCAGGTGAGAGAGATGA
GCAACGTTGTCTTTCTCAAAGCTGTAATGTGGGTTTTGTTTTACTGTTTATTTGTTT
GTTGTTGTATCCTTTTCTCCTTGTATTTGCCCTTCAAGATGCAGTGGGAAAGGCTGGT
TCCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
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Restriction Sites:

Please inquire

ACCN:

NM_003060

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:	<ol style="list-style-type: none"> 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_003060.2</u> , <u>NP_003051.1</u>
RefSeq Size:	3252 bp
RefSeq ORF:	1674 bp
Locus ID:	6584
UniProt ID:	<u>O76082</u>
Cytogenetics:	5q31.1
Domains:	sugar_tr
Protein Families:	Transmembrane
Gene Summary:	<p>Polyspecific organic cation transporters in the liver, kidney, intestine, and other organs are critical for elimination of many endogenous small organic cations as well as a wide array of drugs and environmental toxins. The encoded protein is a plasma integral membrane protein which functions both as an organic cation transporter and as a sodium-dependent high affinity carnitine transporter. The encoded protein is involved in the active cellular uptake of carnitine. Mutations in this gene are the cause of systemic primary carnitine deficiency (CDSP), an autosomal recessive disorder manifested early in life by hypoketotic hypoglycemia and acute metabolic decompensation, and later in life by skeletal myopathy or cardiomyopathy. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Apr 2015]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 5' coding region, compared to variant 1, resulting in an isoform (b) that is shorter than isoform a.</p>