

Product datasheet for **SC118233**

Monocarboxylic acid transporter 1 (SLC16A1) (NM_003051) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Monocarboxylic acid transporter 1 (SLC16A1) (NM_003051) Human Untagged Clone
Tag:	Tag Free
Symbol:	Monocarboxylic acid transporter 1
Synonyms:	HHF7; MCT; MCT1; MCT1D
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 SC118233 sequence for NM_003051 edited (data generated by NextGen Sequencing)

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ATGCCACCAGCAGTTGGAGGTCCAGTTGGATACACCCCCCAGATGGAGGCTGGGGCTGG
GCAGTGGTAATTGGAGCTTTCATTTCCATCGGCTTCTCTTATGCATTTCCCAAATCAATT
ACTGTCTTCTTCAAAGAGATTGAAGGTATATCCATGCCACCACCAGCGAAGTGCATGG
ATATCCTCCATAATGTTGGCTGTCATGTATGGTGGAGGTCCTATCAGCAGTATCCTGGTG
AATAAATATGGAAGTCGTATAGTCATGATTGTTGGTGGCTGCTTGCAGGCTGTGGCTTG
ATTGCAGCTTCTTCTGTAAACACCGTACAGCAACTATACGTCTGTATTGGAGTCATTGGA
GGTCTTGGGCTTGCCTTCAACTTGAATCCAGCTCTGACCATGATTGGCAAGTATTCTAC
AAGAGGCGACCATTGGCCAACGGACTGGCCATGGCAGGCAGCCCTGTGTTCTCTGTACT
CTGGCCCCCTCAATCAGGTTTTCTTCGGTATCTTTGGATGGAGAGGAAGCTTTCTAATT
CTTGGGGCTTGTACTAACTGCTGTGTTGCTGGAGCCCTCATGCGACCAATCGGGCCC
AAGCCAACCAAGGCAGGAAAGATAAGTCTAAAGCATCCCTTGAGAAAGCTGGAAAATCT
GGTGTGAAAAAAGATCTGCATGATGCAAATACAGATCTTATTGGAAGACACCCTAAACAA
GAGAAACGATCAGTCTTCAAACAATTAATCAGTTCCTGGACTTAACCCTATTCACCCAC
AGAGGCTTTTTGCTATACCTCTCTGGAAATGTGATCATGTTTTTTGGACTCTTTCACCT
TTGGTGTTTTCTTAGTAGTTATGGGAAGAGTCAGCATTATTCTAGTGAGAAGTCTGCCTTC
CTTCTTCCATTCGGCTTTTGTGACATGGTAGCCCGACCATCTATGGGACTTGTAGCC
AACACAAGCCAATAAGACCTCGAATTCAGTATTTCTTTCGGCTTCCGTTGTTGCAAAAT
GGAGTGTGTCATATGCTAGCACCTTTATCCACTACCTATGTTGGATTCTGTGTCTATGCG
GGATTCTTTGGATTTGCCTTCGGGTGGCTCAGCTCCGATTGTTTGAACATTGATGGAC
CTTGTGGACCCAGAGGTTCTCCAGCGCTGTGGGATTGGTGACCATTGTGGAATGCTGT
CCTGCTCCTCGGGGCCACCCTTTAGGTTCGGCTCAATGACATGTATGGAGACTACAAA
TACACATACTGGGCATGTGGCGTCGTCCTAATTATTTTCAGGTATCTATCTTTCATTGGC
ATGGGCATCAATTATCGACTTTTGGCAAAAGAACAGAAAGCAAACGAGCAGAAAAAGGAA
AGTAAAGAGGAAGAGACCAGTATAGATGTTGCTGGGAAGCCAAATGAAGTTACCAAAGCA
GCAGAATCTCCGGACCAGAAAGACAGATGGAGGGCCCAAGGAGGAGGAAAGTCCAGCT
TGA
    
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Clone variation with respect to NM_003051.3

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_003051 unedited
TGTAATACGACTCACTATAGGGCGGCCGNGATTCCGGCAGGAGGCGACGTGACTGGCTAG
CTGCGTGGGACTGGAACAAGCAACGAGGCAGCGAGCGAAGGACGGGAGCCGGACCCTG
GGCCCCGTGGAATCCAGCCTGCCACCACGTCACGCACACGCTCGGCGCTGCGATCCG
CGCATATAACGATATTTGGATTTGACCTGCATTTTGAATTTATCTACACTTAAAATGCC
ACCAGCAGTTGGAGGTCAGTTGGATACACCCCCCAGATGGAGGCTGGGGCTGGGCAGT
GGTAATTGGAGCTTTCATTTCCATCGGCTTCTCTTATGCATTTCCCAAATCAATTAAGT
CTTCTTCAAAGAGATTGAAGGTATATTCCATGCCACCACCAGCGAAGTGCATGGATATC
CTCCATAATGTTGGCTGTCATGTATGGTGGAGGTCCTATCAGCAGTATCCTGGTGAATAA
ATATGGAAGTCGTATAGTCATGATTGTTGGTGGCTGCTTGTGAGGCTGTGGCTTGAATGC
AGCTTCTTCTGTAACACCGTACAGCAACTATACGTCTGTATTGGAGTCATTGGAGGCT
TGGGCTTGCCCTCAACTTGAATCCAGCTCTGACCATGATTGGCAAGTATTCTACAAGAG
GCGACCATTGGCCAACGGACTGGCCATGGCAGGCAGCCCTGTGTTCTCTGTACTCTGGC
CCCCCTCAATCAGGTTTTCTTCGGTATCTTTGGATGGAGAGGAAGCTNTCTAATTCTTGG
GGGCTTGTACTAACTGCTGTGNTGCTGGAGCCCTCATGCGACCAAATCGGCCCAAGCC
AACCAGGCAGGNAAGNATAGTCTAAAGCATNCCTTGAGAAAGCTGGAAAATCTGTGTGAA
AAAGACTGCTGATGCAATACAGACTT
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_003051 unedited NNAACGGTTTTACTAAGAACCGCGGCACGCAANCTAGNGATCGGTTTTTTTTTTTTTTTT TTGTTTTCTTAAAAAAGTTTATTTGGAAAATCAGCCTCTTACACAAGTTTTGTATCTAT ACTTTTACTCTGTCAATTACAGTGGTATTTTAAATGCATTGAATATAATTCATTGAATGT CTATATCTTTCTGCCTCGATTTAAGTGATATTAGGTTAAAAAATTTTACAGTTTTTCAT TCTGGTCCACCTCCCTCCTTATCCTTATACTGAATCCATTCTCTACTTTTCAGGTAAG TGAAAGGGGTCACAAAATTTTAAAGTTTGTGTGGAGGGTAAAAATGCATCCAGCAATTCT AAGCACACAATTTTCTGTAAGGCCTTCTGAAAAAAGAGAAAAGAAATTACTTATTA CTAAGCACACTTAGCAACTTCTTTCCCAATCCTATCTTTATTCGTTTGCCTGGTCCAAA TTTTTCTGGCCCTTTTAAATTTGCAAACCTTAAAAAACAACAAAAACAAAAACAC CCAACACACACATATCTCACACATAGCACTAAGCTAGAAGCAGATATAAATGGGACCACT GTGAATCAAAGGGGAAAAATTCAGGAAAAAATTCCAATAGCTTCACAGTTTAACT GAAGTTTTGGAAAACTTAAGTGAATTCAGCTGATGTTTGAATATCTGGTCACATTTAA TTAGATGTGTTGTTTACCAAGGAAGCAACCAATATGTAGTTCCTGTAATTTTAAATACCA AACTTTCCCTAAGAAAATTATACCAGGTGATTTCCAAAAAGGGGCTGGTCTATAAACAC TCAAAAGCCCTCTTTGACAGGAGAAC
Restriction Sites:	NotI-NotI
ACCN:	NM_003051
Insert Size:	4000 bp
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.
	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
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:	NM_003051.2 , NP_003042.2
RefSeq Size:	3410 bp

RefSeq ORF:	1503 bp
Locus ID:	6566
UniProt ID:	P53985
Cytogenetics:	1p13.2
Protein Families:	Transmembrane
Gene Summary:	<p>The protein encoded by this gene is a proton-linked monocarboxylate transporter that catalyzes the movement of many monocarboxylates, such as lactate and pyruvate, across the plasma membrane. Mutations in this gene are associated with erythrocyte lactate transporter defect. Alternatively spliced transcript variants have been found for this gene.[provided by RefSeq, Oct 2009]</p> <p>Transcript Variant: This variant (1) represents the predominant transcript. Variants 1 and 2 encode the same protein.</p>