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Product datasheet for SC108858

MCT2 (SLC16A7) (NM_004731) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCT2 (SLC16A7) (NM_004731) Human Untagged Clone
Tag:	Tag Free
Symbol:	MCT2
Synonyms:	MCT2
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF within SC108858 sequence for NM_004731 edited (data generated by NextGen Sequencing)

ATGCCACCAATGCCAAGTGCCCCACCTGTGCATCCACCTCCAGATGGAGGATGGGGTTGG
ATTGTGGTTGGAGCAGCTTTTATCTCCATTGGATTTTCCTATGCATTCCCCAAAGCTGTC
ACCGTATTCTTCAAAGAAATTCAGCAAATATTCCACACTACCTACAGTGAAATAGCATGG
ATTTCATCCATTATGCTGGCTGTTATGTACGCAGGAGGTCCTGTAAGTAGTGTTTTGGTG
AATAAATACGGCAGCCGGCCGGTGGTGATAGCAGGAGGCTTATTATGCTGTCTTGGAATG
GTGTTGGCCTCCTTTAGTAGCAGCGTGGTACAGCTGTACCTCACTATGGGATTCATTACA
GGTTTAGGTTTAGCCTTCAACCTGCAACCCGCCTTAACCATAATTGGCAAATACTTCTAT
AGGAAGCGACCCATGGCAAATGGATTGGCCATGGCAGGAAGTCCTGTTTTCTTAAGTTCA
TTGGCTCCTTTCAATCAGTACCTTTTTAATACTTTTGGCTGGAAAGGAAGCTTCCTGATT
TTGGGAAGTCTACTTTTGAATGCCTGTGTGGCTGGTTCCCTCATGAGACCCCTTGGACCC
AATCAAACCACTTCTAAGTCTAAAAATAAGACTGGCAAAACAGAAGATGATTCAAGCCCA
AAGAAAATCAAAACGAAGAAATCAACTTGGGAAAAAGTTAATAAGTATTTAGATTTCTCC
CTTTTTAAGCATAGAGGATTTCTGATATATCTGTCTGGAAATGTCATTATGTTCCTAGGT
TTTTTTGCCCCCATTATATTCTTGGCTCCATATGCTAAAGACCAAGGAATTGATGAGTAC
TCGGCAGCTTTTCTGCTATCTGTTATGGCTTTCGTTGATATGTTTGCTAGGCCTTCTGTA
GGATTAATTGCAAACTCCAAATATATTCGACCTCGAATTCAGTACTTCTTCAGTTTTGCA
ATCATGTTCAATGGAGTGTGTCACCTCTTGTGCCCACTGGCACAGGACTACACAAGCCTG
GTATTATATGCTGTATTTTTTGGCCTTGGATTTGGGAGTGTTAGCAGTGTTCTCTTTGAA
ACTCTCATGGACCTCGTGGGTGCACCAAGATTTTCCAGTGCCGTCGGACTTGTCACAATT
GTGGAGTGTGGCCCAGTTCTTCTTGGCCCTCCTCTTGCAGGTAAATTGGTGGATTTAACT
GGAGAATATAAATACATGTACATGTCCTGTGGGGCTATTGTGGTAGCAGCAAGCGTGTGG
CTGCTCATTGGCAATGCTATCAACTATAGATTGCTTGCAAAGGAAAGGAAGGAGGAAAAT
GCAAGGCAGAAGACCAGAGAATCTGAACCCTTGAGCAAATCTAAACATTCGGAAGATGTT
AATGTCAAAGTTTCAAATGCACAGAGTGTAACCTCAGAAAGAGAAACTAACATTTAA

Clone variation with respect to NM_004731.3
1383 c=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004731 unedited
TTCACATTATGTAATACGTACTCACTATAGGGCGGCCGCGAATTCGCACGCAGGCCCACA
AGGGCGTTCAGCAGCCGCGCCTCCCCTTCCCGCCACCGCCTCCTTCTCCGCTGGCTGTGG
CGGGCGAGGACACGTCAGGGGCCATAAATAAATAAATAATTCCATTCACCCGTTGACAGC
GAGGCGAATCGGCTGCGGTTTGCTGGGAACGGAGGGCTGCAGCGCCCACCCTGCGCCAGA
GACCAGATAAAGAGTCAATCTTAAGATGTGATACTTTCCTGTGAAACCTGAAACAAGGTG
ATCTGGGGAACCAAAGACTCTGGGACTCTTGGTGCCAACAGAGTTACTCTGTTACTTGAA
TTTCCACTAGAGGAGCAGAAATGCCACCAATGCCAAGTGCCCCACCTGTGCATCCACCTC
CAGATGGAGGATGGGGTTGGATTGTGGTTGGAGCAGCTTTTATCTCCATTGGATTTTCCT
ATGCATTCCCCAAAGCTGTCACCGTATTCTTCAAAGAAATTCAGCAAATATTCCACACTA
CCTACAGTGAAATAGCATGGATTTCATCCATTATGCTGGCTGTTATGTACGCAGGAGGTC
CTGTAAGTAGTGTTTTGGTGAATAAATACGGCAGCCGGCCGGTGGTGATAGCAGGAGGCT
TATTATGCTGTCTTGGAATGGTGTTGGCCTCCTTTAGTAGCAGCGTGGTACAGCTGTACC
TCACTATNGGATTCATTACAGGTTTAGGGTTAGCCTTTAACCTGCAACCCGCCTTAANCC
ATTAATGNCAAAAACTTCTATAGGAAGCGAACCCTGGCAAATGGATTGGCCCATTGCCAG
AAGNCCTGTTTTCCTTAAGATCATTGGCTCCTTTCAATAAGAACCTCTTTATACTTTTGG
CTGAAAAGGAGCTTCCGATTTGGGAAGCCTACTTTTGAGCCTGGGCGGCTGGTCC

3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_004731 unedited
AGCTCTGGACCCGCGGCCGCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTGAAAATTA
TGATTGGAGAGGTACTACACAATTTAGAGGTTACATTTCTTGACAAATCTGAGTTGAATA
AAAAAGAACTAAAAATATAAACATAGCTAATTCAAGAATCAAGATCGGGTGAAACTAAAT
TAAAAACAGCCATAAAGTCCCACATTTTCCCTAATTTATTTACCTATGATATTGGCACAT
CTTGTTTTACTTAACATTTGAAAAATACAAATATCTCTTCATATGCAAAAGAGCAAATGT
TAAATGAAAAACTGAATTTTATATAGCTTCCTAAATATGAGCCACATGCTTAAGCAGTGA
ATTAACTTTATGAATCAAATGTTTAATGTTAACTATTACAAAAGCCTGGTATCCAGGTGC
AATCTCACCAGAAAAAAATAGCACCTGCCTTTATTACAATAAAAAAAATGGCTAATTCCC
TTTGACATCTTAAGAGTGACACTACTTTGTCAAGCACTAAATACTTTTTAAATTAATCAT
AATGTTAAACTTCAGATTTATAGATATAAATATTGTATTTATAACTTTAGTCATAATGTA
CAATTTCTTTCTTGTTTAAAAGTACTTTCTCACTCAAAATGGTATTTATAGTTTAAAAAG
AATATGCCTCTGTATTCAAGAGTGATTCAAATTCCCAGATGTTTTCACATAGTTATGAAA
ATGGGAAAGTGCTGGATTAAACTGGGCTGCAATATTCCAAGTTTTTGCTATCAGGTATAA
CTATACCTACGATTGAAGGCTACAGTGCCTCTATTTCTAGAAGCTTTTAAAGTTCCTGGC
TTANTATGTCCAAGGCGCAGGAAGCTCATCGTAGAGGCAGATNTTCAGGGCTGCCTTCTT
ATCCCAGAGGCTTTCCGGGTTGGAGCCAGGCCGGTGGAGTTGGCTTTGGCCTTGCTTTGG
G
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Restriction Sites: NotI-NotI

ACCN: NM_004731

Insert Size: 4000 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: NM_004731.3, NP_004722.2

RefSeq Size: 3575 bp

RefSeq ORF: 1437 bp

Locus ID: 9194

UniProt ID: O60669

Cytogenetics: 12q14.1

Domains: sugar_tr

Protein Families: Transmembrane

Gene Summary: This gene is a member of the monocarboxylate transporter family. Members in this family transport metabolites, such as lactate, pyruvate, and ketone bodies. The protein encoded by this gene catalyzes the proton-linked transport of monocarboxylates and has the highest affinity for pyruvate. This protein has been reported to be more highly expressed in prostate and colorectal cancer specimens when compared to control specimens. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2012]
Transcript Variant: This variant (3) differs in the 5' UTR compared to variant 1. Variants 1, 2 and 3 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.