

Product datasheet for **RC232821**

MCT2 (SLC16A7) (NM_001270623) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCT2 (SLC16A7) (NM_001270623) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MCT2
Synonyms:	MCT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC232821 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCCACCAATGCCAAGTGCCCCACCTGTGCATCCACCTCCAGATGGAGGATGGGGTTGGATTGTGGTTG
 GAGCAGCTTTTATCTCCATTGGATTTTCTATGCATCCCAAAGCTGTACCGTATTCTCAAAGAAAT
 TCAGCAAATATCCACACTACCTACAGTAAATAGCATGGATTTTCATCCATTATGCTGGCTGTTATGTAC
 GCAGGAGGTCCTGTAAGTAGTGTGGTGAATAAATACGGCAGCCGGCCGGTGGTATAGCAGGAGGCT
 TATTATGCTGTCTTGAATGGTGTGGCCTCCTTAGTAGCAGCGTGTACAGCTGTACCTCACTATGGG
 ATTCATTACAGGTTTAGGTTTAGCCTTCAACCTGCAACCCGCCTTAACCATAATTGGCAAATACTTCTAT
 AGGAAGCGACCCATGGCAAATGGATTGGCCATGGCAGGAAGTCTGTTTTCTAAGTTCATTGGCTCCTT
 TCAATCAGTACCTTTTAACTTTTGGCTGGAAAGGAAGCTTCTGATTTTGGGAAGTCTACTTTTGAA
 TGCTGTGTGGCTGGTCCCTCATGAGACCCCTTGGACCAATCAAACCACTTCTAAGTCTAAAAATAAG
 ACTGGCAAACAGAAGATGATTCAGCCCAAAGAAAATCAAACGAAGAAATCAACTTGGGAAAAAGTTA
 ATAAGTATTTAGATTTCTCCCTTTTAAAGCATAGAGGATTTCTGATATATCTGTCTGGAAATGTCATTAT
 GTTCTAGGTTTTTTGCCCCATTATATTCTGGCTCCATATGCTAAAGACCAAGGAATTGATGAGTAC
 TCGGCAGCTTTTCTGCTATCTGTTATGGCTTTCGTTGATGTTTGTAGGCCTTCTGTAGGATTAATTG
 CAACTCCAAATATATTCGACCTCGAATTCAGTACTTCTCAGTTTTGCAATCATGTTCAATGGAGTGTG
 TCACCTCTTGCCCACTGGCACAGGACTACACAAGCCTGGTATTATGCTGTATTTTTGGCCTTGGAA
 TTTGGGAGTGTAGCAGTGTCTCTTGAACCTCATGGACCTCGTGGTGCACCAAGATTTTCCAGTG
 CCGTCCGACTTGTCACAATTGTGGAGTGTGGCCAGTCTTCTTGGCCCTCCTTCTGCAGTAAATTTGGT
 GGATTTAACTGGAGAATAAAATACATGTACATGTCCTGTGGGGCTATTGTGGTAGCAGCAAGCGTGTGG
 CTGCTCATTGGCAATGCTATCAACTATAGATTGCTTGAAGGAAAGGAAGGAGGAAAATGCAAGGCAGA
 AGACCAGAGAATCTGAACCCCTGAGCAAATCTAAACATTCGGAAGATGTTAACGTCAAAGTTTCAAATGC
 ACAGAGTGTAACTCAGAAAGAGAACTAACATT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC232821 protein sequence
 Red=Cloning site Green=Tags(s)

MPPMPSAPPVHPPDGGWGIVVGAAFISIGFSYAFPKAVTVFFKEIQQIFHTTYSEIAWISSIMLAVMY
 AGGPVSSVLVNKYGSRPVVIAGLLCCLGMVLASFSSSVVQLYLTMGFITGLGLAFNLQPALTIIGKYFY
 RKRPMANGLAMAGSPVFLSSLAPFNQYLFNTFGWKGSFLILGSLLLNACVAGSLMRPLGPNQTTSSKSKNK
 TGKTEDDSSPKIKTKKSTWEKVNKYLDFSLFKHRGFLIYLSGNVIMFLGFFAPIIFLAPYAKDQGIIDEY
 SAAFLLSVMAFVDMFARPSVGLIANSKYIRPRIQYFFSFAIMFNGVCHLLCPLAQDYTSLVLYAVFFGLG
 FGSVSSVLFETLMDLVGAPRFSsavGLVIVECGPVLLGPPLAGKLVDLTGEYKMYMSCGAIVVAASVW
 LLIGNAINYRLLAKERKEENARQKTRESEPLSKSKHSEDEVNVKVSNAQSVTSERETNI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6196_d10.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001270623

ORF Size: 1434 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

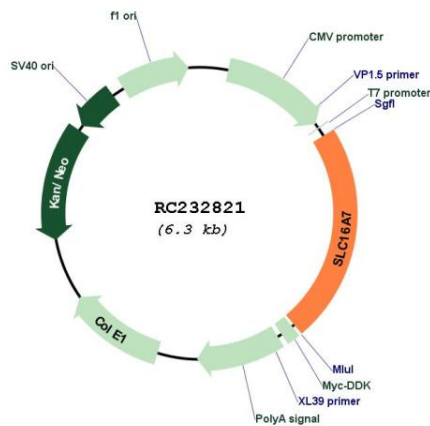
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_001270623.2](#)
RefSeq Size: 11939 bp
RefSeq ORF: 1437 bp
Locus ID: 9194
UniProt ID: [O60669](#)
Cytogenetics: 12q14.1
Protein Families: Transmembrane
MW: 52.2 kDa
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]

Product images:



Circular map for RC232821