

Product datasheet for **RG205361**

MCT2 (SLC16A7) (NM_004731) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCT2 (SLC16A7) (NM_004731) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MCT2
Synonyms:	MCT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG205361 representing NM_004731
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCCACCAATGCCAAGTGCCCCACCTGTGCATCCACCTCCAGATGGAGGATGGGGTTGGATTGTGGTTG
 GAGCAGCTTTTATCTCCATTGGATTTTCTATGCATCCCAAAGCTGTACCGTATTCTCAAAGAAAT
 TCAGCAAATATCCACACTACCTACAGTAAATAGCATGGATTTTCATCCATTATGCTGGCTGTTATGTAC
 GCAGGAGGTCCTGTAAGTAGTGTGGTGAATAAATACGGCAGCCGGCCGGTGGTGATAGCAGGAGGCT
 TATTATGCTGTCTTGAATGGTGTGGCCTCCTTAGTAGCAGCGTGTACAGCTGTACCTCACTATGGG
 ATTCATTACAGGTTTAGGTTTAGCCTTCAACCTGCAACCCGCCTTAACCATAATTGGCAAATACTTCTAT
 AGGAAGCGACCCATGGCAAATGGATTGGCCATGGCAGGAAGTCTGTTTTCTAAGTTCATTGGCTCCTT
 TCAATCAGTACCTTTTAACTTTTGGCTGGAAAGGAAGCTTCTGATTTTGGGAAGTCTACTTTTGAA
 TGCTGTGTGGCTGGTCCCTCATGAGACCCCTTGGACCAATCAAACCACTTCTAAGTCTAAAAAATAAG
 ACTGGCAAACAGAAGATGATTCAGCCCAAAGAAAATCAAACGAAGAAATCAACTTGGGAAAAAGTTA
 ATAAGTATTTAGATTTCTCCCTTTTAAAGCATAGAGGATTTCTGATATATCTGTCTGGAAATGTCATTAT
 GTTCTAGGTTTTTTGCCCCATTATATTCTGGCTCCATATGCTAAAGACCAAGGAATTGATGAGTAC
 TCGGCAGCTTTTCTGCTATCTGTTATGGCTTCGTTGATATGTTGCTAGGCCTTCTGTAGGATTAATTG
 CAACTCCAAATATATTCGACCTCGAATTCAGTACTTCTCAGTTTTGCAATCATGTTCAATGGAGTGTG
 TCACCTCTTGCCCACTGGCACAGGACTACACAAGCCTGGTATTATGCTGTATTTTTGGCCTTGGG
 TTTGGGAGTGTAGCAGTGTCTCTTTGAACTCTCATGGACCTCGTGGGTGCACCAAGATTTTCCAGTG
 CCGTCGGACTTGTACAATTGTGGAGTGTGGCCAGTCTCTTGGCCCTCCTTTCAGGTAATTTGTTGTT
 GGATTTAACTGGAGAATAAAATACATGTACATGTCTGTGGGGCTATTGTGGTAGCAGCAAGCGTGTGG
 CTGCTCATTGGCAATGCTATCAACTATAGATTGCTTGCAAAGGAAAGGAAGGAGGAAAATGCAAGGCAGA
 AGACCAGAGAATCTGAACCCCTGAGCAAATCTAAACATTCGGAAGATGTTAACGTCAAAGTTTCAAATGC
 ACAGAGTGAACCTCAGAAAGAGAACTAACATT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG205361 representing NM_004731
 Red=Cloning site Green=Tags(s)

MPPMPSAPPVHPPDGGWGWIVVGAAFISIGFSYAFPKAVTVFFKEIQQIFHTTYSEIAWISSIMLAVMY
 AGGPVSSVLVNKYGSRPVVIAGLLCCLGMVLASFSSSVVQLYLTMGFITGLGLAFNLQPALTIIGKYFY
 RKRPMANGLAMAGSPVFLSSLAPFNQYLFNTFGWKGSFLILGSLLLNACVAGSLMRPLGPNQTTSSKSNK
 TGKTEDDSSPKIKTKKSTWEKVNKYLDFSLFKHRGFLIYLSGNVIMFLGFFAPIIFLAPYAKDQIDEY
 SAAFLLSVMAFVDMFARPSVGLIANSKYIRPRIQYFFSFAIMFNGVCHLLCPLAQDYTSLVLYAVFFGLG
 FGSVSSVLFETLMDLVGAPRFSSAVGLVTIVECGPVLLGPPLAGKLVDLTGEYKMYMSCGAIVVAASVW
 LLIGNAINYRLLAKERKEENARQKTRESEPLSKSKHSEDEVNVKVSNAQSVTSERETNI

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_004731

ORF Size: 1434 bp

OTI Disclaimer: 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_004731.5](#)

RefSeq Size: 3575 bp

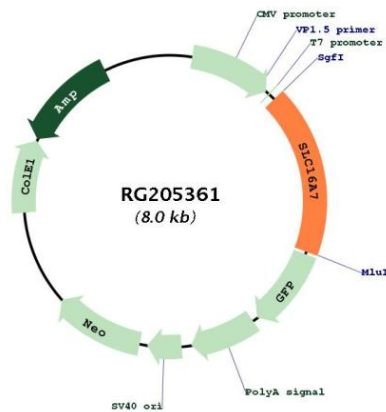
RefSeq ORF: 1437 bp

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]

Product images:



Circular map for RG205361