

Product datasheet for **RC230227**

MCT7 (SLC16A6) (NM_001174166) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCT7 (SLC16A6) (NM_001174166) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MCT7
Synonyms:	MCT6; MCT7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC230227 representing NM_001174166
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACCCAAAATAAATTAAGCTTTGTTCCAAAGCCAATGTGTATACTGAAGTGCCTGATGGAGGATGGG
 GCTGGGGCGTAGCTGTTTCATTTTTCTCGTTGAAGTCTTCACCTACGGCATCATCAAGACATTTGGTGT
 CTTCTTTAATGACTTAATGGACAGTTTTAATGAATCCAATAGCAGGATTCATGGATAATCTCAATCTGT
 GTGTTTGTCTTAACATTTTCAGCTCCCCTCGCCACAGTCTGAGCAATCGTTTCGGACACCGTCTGGTAG
 TGATGTTGGGGGGCTACTTGTGACAGCCGGGATGGTGGCCGCTCCTTCTCACAAGAGGTTTCTCATAT
 GTACGTCGCCATCGGCATCATCTCTGGTCTGGGATACTGCTTTAGTTTTCTCCAACTGTAACCATCCTA
 TCACAATATTTGGCAAAGACGTTCCATAGTCACTGCAGTTGCTCCACAGGAGAATGTTTCGCTGTGT
 TTGCTTTCGACCAGCAATCATGGCTCTGAAGGAGCGCATTGGCTGGAGATACAGCCTCCTCTTCGTGGG
 CCTACTACAGTTAAACATTGTCATCTTCGGAGCACTGCTCAGACCATCTTTATCAGAGGACCAGCGTCA
 CCGAAAATAGTCATCCAGGAAAATCGGAAAAGAAGCGCAGTATATGCTTGA AAAATGAGAAAACACGAACCT
 CAATAGACTCCATTGACTCAGGAGTAGAACTAACTACCTCACCTAAAAATGTGCCTACTCACACTAACCT
 GAACTGGAGCCGAAGGCCGACATGCAGCAGGTCTGGTGAAGACCAGCCCCAGGCCAAGCGAAAAGAAA
 GCCCCGCTATTAGACTTCTCCATTTTGAAGAGAAAAGTTTTATTTGTTATGCATTATTTGGTCTCTTTG
 CAACACTGGGATTCTTTGACCTTCTTGACATCATTCTCTGGGCATTAGTCTGGGCATTGACCAGGA
 CCGCGTCTTTTTTATTATCTACGATGGCCATTGCAGAAGTTTTCGAAGGATCGGAGCTGGTTTTGTCT
 CTCACAGGGAGCCATTTCGTAAGATTTACATTGAGCTCATCTGCGTCATCTTATTGACTGTCTCTGT
 TTGCCTTTACTTTTGTACTGAATCTGGGGTCTAATGTCATGCAGCATATTTTTTGGTTTTATGGTTGG
 AACAAATAGGAGGACTCACATTCCTGCTTGGTGGAGGATGATGTCGTTGGCATTGAGAAGATGCTTCT
 GCAGCTGGGGTCTACATCTTCATTTCAGAGCATAGCAGGACTGGTGGACCGCCCTTGCAGTGTGTTGG
 TGGACCAAAGTAAGATCTACAGCAGGCCTTCTACTCCTGCGCAGCTGGCATGGCCCTGGCTGCTGTGTG
 CCTCGCCCTGGTGAAGGACTGTAAGATGGGACTGTGCCAGCATCATCACTCAGGTGAAACAAAGGTAGTG
 AGCCATCGTGGGAAGACTTTACAGGACATACCTGAAGACTTTCTGGAAATGGATCTTGCAAAAAATGAGC
 ACAGAGTTCACGTCAAATGGAGCCGTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC230227 representing NM_001174166
 Red=Cloning site Green=Tags(s)

MTQNKLKLCSKANVYTEVPDGGWGWAVVAVSFFVVEVFTYGIKTFGVFFNDLMSFNESNSRISWIISIC
 VFVLTFSAPLATVLSNRFGRHLVVMLGGLLVSTGMVAASFVSEVSHMYVAIGIISGLGYCF SFLPTVTIL
 SQYFGKRRSIVTAVASTGECFAVFAPAIMALKERIGWRYSLLFVGLLQLNIVIFGALLRPIFIRGPAS
 PKIVIQENRKEAQYMLENEKTRTSIDSIDSGVELTTPKNVPTHNLELEPKADMQQVLVKTSPRPSEKK
 APLLDFSILKEKSFICYALFGLFATLGFAPSLYIIPLGISLQDRAAFLLSTMAIAEVFGRIGAGFV
 LNREPIRKIYIELICVILLTVSLFAFTFATEFWGLMSCSIFFGFMVGTIGGTHIPLLAEDDVVIEKMSS
 AAGVYIFIQSIAGLAGPPLAGLLVDQSKIYSRAFYSACAAGMALAAVCLALVRPCKMGLCQHHSGETKVV
 SHRGKTLQDIPEDFLEMDLAKNEHRVHVQMEPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8007_d05.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001174166

ORF Size: 1569 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_001174166.2](#)

RefSeq ORF: 1572 bp

Locus ID: 9120

UniProt ID: [O15403](#)

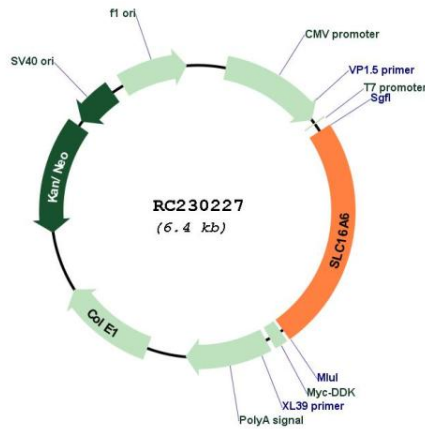
Cytogenetics: 17q24.2

Protein Families: Transmembrane

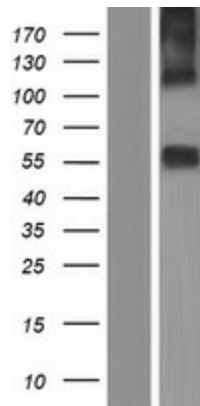
MW: 57.8 kDa

Gene Summary: Proton-linked monocarboxylate transporter. Catalyzes the rapid transport across the plasma membrane of many monocarboxylates such as lactate, pyruvate, branched-chain oxo acids derived from leucine, valine and isoleucine, and the ketone bodies acetoacetate, beta-hydroxybutyrate and acetate (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC230227



Western blot validation of overexpression lysate (Cat# [LY433227]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230227 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).