

Product datasheet for **RC213416**

SLC16A3 (NM_001042422) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC16A3 (NM_001042422) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC16A3
Synonyms:	MCT-3; MCT-4; MCT 3; MCT3; MCT 4; MCT4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC213416 representing NM_001042422
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGGAGGGGCCGTGGTGGACGAGGGCCCCACAGCGCTCAAGGCCCTGACGGCGCTGGGGCTGGGCCG
 TGCTCTTCGGCTGTTTCGTCATCACTGGCTTCTCTACGCCTTCCCAAGGCCGTAGTGTCTTCTCAA
 GGAGCTCATAAGGATTTGGGATCGGCTACAGCGACACAGCCTGGATCTCCTCCATCCTGCTGGCCATG
 CTCTACGGGACAGGTCCGCTCTGCACTGTGTGCGTGAACCGCTTTGGCTGCCGGCCCGTATGCTTGTGG
 GGGGTCTCTTTCGCTCGCTGGGCATGGTGGCTGCGTCTTTTGGCGGAGCATCATCCAGGTCTACCTCAC
 CACTGGGGTCACTACGGGTTGGGTTGGCACTCAACTCCAGCCCTCGCTCATCATGCTGAACCGCTAC
 TTCAGCAAGCGGCCCATGGCAACGGGCTGGCGGCAGCAGGTAGCCCTGTCTTCTGTGTGCCCTGA
 GCCCGCTGGGGCAGCTGCTGCAGGACCGCTACGGCTGGCGGGCGGCTTCTCATCTGGCGGCCCTGCT
 GCTCAACTGCTGGTGTGTGCCGACTCATGAGCCCCCTGGTGGTACGCGCCAGCCGGGCTCGGGGCCG
 CCGCGACCCTCCCGCGCCTGCTAGACCTGAGCGTCTTCCGGGACCGCGCTTTGTGCTTACGCCGTGG
 CCGCTCGGTATGGTGTGGGGCTCTTCTGTCGCCCGCTGTTCTGTGGTGAAGTACGCCAAGGACCTGGG
 CGTGCCCGACACCAAGGCCGCTTCTGCTCACCATCCTGGGCTTATTGACATCTTCGCGCGGCCGGCC
 GCGGGCTTCGTGGCGGGCTTGGGAAGGTGCGGCCCTACTCCGTCTACCTCTTACGCTTCTCCATGTTCT
 TCAACGGCCTCGCGGACCTGGCGGGCTCTACGGCGGGCGACTACGGCGGCTCGTGGTCTTCTGCATCTT
 CTTTGGCATCTCTACGGCATGGTGGGGCCCTGCAGTTCGAGGTGCTCATGGCCATCGTGGGACCCAC
 AAGTCTCCAGTGCCATTGGCTGGTGTGCTGATGGAGCGGTGGCCGTGCTCGTGGGCCCCCTCGG
 GAGGCAAACTCTGGATGCGACCCAGTCTACATGACGTGTTTCTCATCTGGCGGGGCGGAGGTGCTCAG
 CTCTCCCTGATTTTGTGCTGGGCAACTTCTTCTGCATTAGGAAGAAGCCCAAAGAGCCACAGCCTGAG
 GTGGCGCCGCGGAGGAGAGAAGCTCCACAAGCCTCTGCAGACTCGGGGTGGACTTGCGGGAGGTGG
 AGCATTTCTGAAGGCTGAGCCTGAGAAAAACGGGGAGGTGGTTCACACCCCGAAACAAGTGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213416 representing NM_001042422
 Red=Cloning site Green=Tags(s)

MGGAVVDEGPTGVKAPDGGGWAVLFGCFVITGFSYAFPKAVSVFFKELIQEFGIGYSDTAWISSILLAM
 LYGTGPLCSVCVNRFGCRPVMLVGGLFASLGMVAASFCSIIQVYLTGVTGLGLALNFQPSLIMLNRY
 FSKRRPMANGLAAGSPVFLCAL SPLGQLLQDRYGWRGGFLILGGLLNCCVCAALMRPLVVTAQPGSGP
 PRPSRRLDL SVFRDRGFVLYAVAASVMVLGLFVPPVFVVSYAKDLGVPDTKAAFLLTILGFIDIFARPA
 AGFVAGLGKVRPYSVYLF SF SMFFNGLADLAGSTAGDYGLLVFCIFFGISYGMV GALQFEVLM AIVGTH
 KFSSAIGLVLLMEAVAVLVGPPSGKLLDATHVYMYVFILAGAEVLTSSLILLGNFFCIRKKPKPEPQE
 VAAAEELKHKPPADSGVDLREVEHFLKAEPEKNGEVVHTPETS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg3945_d05.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001042422

ORF Size: 1395 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.

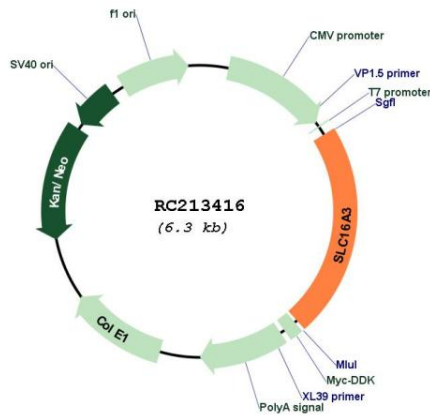
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_001042422.2](#)
 RefSeq Size: 2054 bp
 RefSeq ORF: 1398 bp
 Locus ID: 9123
 UniProt ID: [O15427](#)
 Cytogenetics: 17q25.3
 Protein Families: Transmembrane
 MW: 49.3 kDa

Gene Summary: Lactic acid and pyruvate transport across plasma membranes is catalyzed by members of the proton-linked monocarboxylate transporter (MCT) family, which has been designated solute carrier family-16. Each MCT appears to have slightly different substrate and inhibitor specificities and transport kinetics, which are related to the metabolic requirements of the tissues in which it is found. The MCTs, which include MCT1 (SLC16A1; MIM 600682) and MCT2 (SLC16A7; MIM 603654), are characterized by 12 predicted transmembrane domains (Price et al., 1998 [PubMed 9425115]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RC213416