

## Product datasheet for SC311277

# SLC16A3 (NM 001042423) Human Untagged Clone

### **Product data:**

**Product Type: Expression Plasmids** 

**Product Name:** SLC16A3 (NM\_001042423) Human Untagged Clone

Tag: Tag Free SLC16A3 Symbol:

Synonyms: MCT-3; MCT-4; MCT 3; MCT3; MCT 4; MCT4

Vector: pCMV6 series

>NCBI ORF sequence for NM\_001042423, the custom clone sequence may differ by one or **Fully Sequenced ORF:** 

more nucleotides

ATGGGAGGGCCGTGGTGGACGAGGGCCCCACAGGCGTCAAGGCCCCTGACGGCGGCTGG GGCTGGCCGTGCTCTTCGGCTGTTTCGTCATCACTGGCTTCTCCTACGCCTTCCCCAAG GCCGTCAGTGTCTTCTTCAAGGAGCTCATACAGGAGTTTGGGATCGGCTACAGCGACACA GCCTGGATCTCCTCCATCCTGCTGGCCATGCTCTACGGGACAGGTCCGCTCTGCAGTGTG TGCGTGAACCGCTTTGGCTGCCGGCCCGTCATGCTTGTGGGGGGGTCTCTTTGCGTCGCTG GGCATGGTGGCTGCGTCCTTTTGCCGGAGCATCATCCAGGTCTACCTCACCACTGGGGTC ATCACGGGGTTGGGTTTGGCACTCAACTTCCAGCCCTCGCTCATCATGCTGAACCGCTAC TTCAGCAAGCGGCCCCCATGGCCAACGGGCTGGCGGCAGCAGGTAGCCCTGTCTTCCTG TGTGCCCTGAGCCCGCTGGGGCAGCTGCTGCAGGACCGCTACGGCTGGCGGGGCGGCTTC CTCATCCTGGGCGGCCTGCTCAACTGCTGCGTGTGTGCCGCACTCATGAGGCCCCTG GTGGTCACGGCCCAGCCGGGCTCGGGGCCGCCGCGACCCTCCCGGCGCCTGCTAGACCTG AGCGTCTTCCGGGACCGCGCTTTGTGCTTTACGCCGTGGCCGCCTCGGTCATGGTGCTG GGGCTCTTCGTCCCGCCCGTGTTCGTGGTGAGCTACGCCAAGGACCTGGGCGTGCCCGAC GCGGGCTTCGTGGCGGGCCTTGGGAAGGTGCGGCCCTACTCCGTCTACCTCTTCAGCTTC CTCGTGGTCTTCTGCATCTTCTTTGGCATCTCCTACGGCATGGTGGGGGCCCTGCAGTTC GAGGTGCTCATGGCCATCGTGGGCACCCACAAGTTCTCCAGTGCCATTGGCCTGGTGCTG CTGATGGAGGCGGTGCCCGTCGGGGCCCCCTTCGGGAGGCAAACTCCTGGATGCG ACCCACGTCTACATGTACGTGTTCATCCTGGCGGGGGCCGAGGTGCTCACCTCCCTG ATTTTGCTGCTGGGCAACTTCTTCTGCATTAGGAAGAAGCCCAAAGAGCCACAGCCTGAG GTGGCGGCCGCGGAGGAGAAGCTCCACAAGCCTCCTGCAGACTCGGGGGTGGACTTG CGGGAGGTGGAGCATTTCCTGAAGGCTGAGCCTGAGAAAAACGGGGAGGTGGTTCACACC CCGGAAACAAGTGTCTGA

**Restriction Sites:** Please inquire ACCN: NM 001042423



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#### **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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <u>More info</u>

**OTI Annotation:** 

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 001042423.1, NP 001035888.1</u>

 RefSeq Size:
 2033 bp

 RefSeq ORF:
 1398 bp

 Locus ID:
 9123

 UniProt ID:
 015427

 Cytogenetics:
 17q25.3

**Protein Families:** Transmembrane



#### **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]

Transcript Variant: This variant (4) differs in the 5' UTR compared to variant 1. Variants 1, 2, 3, 4, 5 and 6 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.