

Product datasheet for **RG230182**

Monocarboxylic acid transporter 1 (SLC16A1) (NM_001166496) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Monocarboxylic acid transporter 1 (SLC16A1) (NM_001166496) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Monocarboxylic acid transporter 1
Synonyms:	HHF7; MCT; MCT1; MCT1D
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG230182 representing NM_001166496
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCCACCAGCAGTTGGAGGTCCAGTTGGATACACCCCCCAGATGGAGGCTGGGGCTGGGCAGTGGTAA
 TTGGAGCTTTTCATTTCCATCGGCTTCTCTTATGCATTTCCCAAATCAATTAAGTCTTCTCAAAGAGAT
 TGAAGGTATATCCATGCCACCACCAGCGAAGTGTGATGATATCCTCCATAATGTTGGCTGTCATGTAT
 GGTGGAGGTCCTATCAGCAGTATCCTGGTGAATAAATATGGAAGTCGTATAGTCATGATTGTTGGTGGCT
 GCTTGTGACGGCTGGCTTGATTGCAGCTTCTTTCTGTAACACCGTACAGCAACTATACGCTGTATTGG
 AGTCATTGGAGGCTTGGGCTTGCCTTCAACTGAATCCAGCTCTGACCATGATTGGCAAGTATTTCTAC
 AAGAGGCGACCATTGGCCAACGGACTGGCCATGGCAGGCAGCCCTGTGTTCTCTGTACTCTGGCCCCC
 TCAATCAGGTTTTCTTCGGTATCTTTGGATGGAGAGGAAGCTTTCTAATCTTGGGGCTTGCTACTAAA
 CTGCTGTGTTGCTGGAGCCCTCATGCGACCAATCGGGCCCAAGCCAACCAAGGCAGGAAAGATAAGTCT
 AAAGCATCCCTTGAGAAAGCTGGAATCTGGTGTGAAAAAGATCTGCATGATGCAAAACAGATCTTA
 TTGGAAGACACCCATAACAAGAGAAACGATCAGTCTTCCAAACAATTAATCAGTTCCTGGACTTAACCTT
 ATTCACCCACAGAGGCTTTTGTATACCTCTCTGAAATGTGATCATGTTTTTGGACTCTTTCACCT
 TTGGTGTTCCTTAGTAGTTATGGGAAGAGTCAGCATTATCTAGTGAGAAGTCTGCCTTCTTCTTTCCA
 TTCTGGCTTTTGTGACATGGTAGCCGACCATCTATGGGACTTGTAGCCAACACAAAGCCAATAAGACC
 TCGAATCAGTATTTCTTGGCGCTTCCGTTGTTGCAATGGAGTGTGCATATGCTAGCACCTTATCC
 ACTACCTATGTTGGATTCTGTCTATGCGGGATTCTTTGGATTGCCTTCGGGTGGCTCAGCTCCGAT
 TGTTTGAAACATTGATGGACCTTGTGGACCCAGAGGTTCTCCAGCGCTGTGGGATTGGTACCATTGT
 GGAATGCTGTCCCTGCTCGGGCCACCACTTTTAGGTCGGCTCAATGACATGTATGGAGACTACAAA
 TACACATACTGGGCATGTGGCGTCGTCCTAATTATTTAGGTATCTATCTCTTATTGGCATGGGCATCA
 ATTATCGACTTTTGGCAAAGAACAGAAAGCAAACGAGCAGAAAAAGGAAAGTAAAGAGGAAAGAGACCAG
 TATAGATGTTGCTGGGAAGCCAAATGAAGTTACCAAAGCAGCAGAATCTCCGGACCAGAAAGACACAGAT
 GGAGGGCCCAAGGAGGAGGAAAGTCCAGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG230182 representing NM_001166496
 Red=Cloning site Green=Tags(s)

MPPAVGGPVGYTPPDGGWGWAVVIGAFISIGFSYAFPKSITVFFKEIEGIFHATTSEVSWISSIMLAVMY
 GGGPISSILVNKYGSRIVMIVGGCLSGCGLIAASFNTVQQLYVCIGVIGLGLAFNLNLPALTMIGKYFY
 KRRPLANGLAMAGSPVFLCTLAPLNQVFFGIFGWRGSFLILGLLLLNCCVAGALMRPIGPKPTKAGDKS
 KASLEKAGKSGVKKDLHDANTDLIGRHPKQEKRSVFQINQFLDLTLFTHRGFLLYLSGNVIMFFGLFAP
 LVFLSSYGKSKHYSSEKSAFLLSILAFVDMVARPSMGLVANTKPIRPRIQYFFAASVVANGVCHMLAPLS
 TTYVGFVYAGFFGFAGWLVSVLFTLMDLVGPQRFSSAVGLVTIVECCPVLLGPPLLGRLLNDMYGDYK
 YTYWACGVVLIISGIYLFIMGINYRLLAKEQKANEQKESKEEETSIDVAGKPNVTKAAESPDQKDTD
 GGPKEEESPV

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001166496

ORF Size: 1500 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).

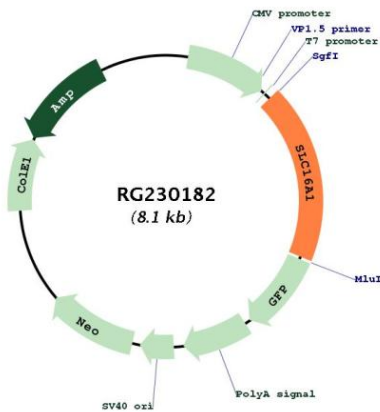
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_001166496.1](#), [NP_001159968.1](#)

RefSeq Size: 4390 bp
 RefSeq ORF: 1503 bp
 Locus ID: 6566
 UniProt ID: [P53985](#)
 Cytogenetics: 1p13.2
 Protein Families: Transmembrane
 Gene Summary:

The protein encoded by this gene is a proton-linked monocarboxylate transporter that catalyzes the movement of many monocarboxylates, such as lactate and pyruvate, across the plasma membrane. Mutations in this gene are associated with erythrocyte lactate transporter defect. Alternatively spliced transcript variants have been found for this gene.[provided by RefSeq, Oct 2009]

Product images:



Circular map for RG230182