

Product datasheet for **RG205213**

Monocarboxylic acid transporter 1 (SLC16A1) (NM_003051) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Monocarboxylic acid transporter 1 (SLC16A1) (NM_003051) 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:

>RG205213 representing NM_003051
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCACCAGCAGTTGGAGGTCCAGTTGGATACACCCCCCAGATGGAGGCTGGGGCTGGGCAGTGGTAA
 TTGGAGCTTTTCATTTCCATCGGCTTCTCTTATGCATTTCCCAAATCAATTAAGTCTTCTCAAAGAGAT
 TGAAGGTATATCCATGCCACCACCAGCGAAGTGTGATGATATCCTCCATAATGTTGGCTGTCATGTAT
 GGTGGAGGTCCTATCAGCAGTATCCTGGTGAATAAATATGGAAGTCGTATAGTCATGATTGTTGGTGGCT
 GCTTGTGAGGCTGGCTTGATTGCAGCTTCTTTCTGTAACACCGTACAGCAACTATACGCTGTATTGG
 AGTCATTGGAGGCTTGGGCTTGCCTTCAACTGAATCCAGCTCTGACCATGATTGGCAAGTATTTCTAC
 AAGAGGCGACCATTGGCCAACGGACTGGCCATGGCAGGCAGCCCTGTGTTCTCTGTACTCTGGCGCCC
 TCAATCAGGTTTTCTTCGGTATCTTTGGATGGAGAGGAAGCTTTCTAATTCCTGGGGCTTGCTACTAAA
 CTGCTGTGTTGCTGGAGCCCTCATGCGACCAATCGGGCCCAAGCCAACCAAGGCAGGAAAGATAAGTCT
 AAAGCATCCCTTGAGAAAGCTGGAATCTGGTGTGAAAAAGATCTGCATGATGCAAAACAGATCTTA
 TTGGAAGACACCCATAACAAGAGAAACGATCAGTCTTCCAAACAATTAATCAGTTCCTGGACTTAACCTT
 ATTCACCCACAGAGGCTTTTTGCTATACCTCTCTGAAATGTGATCATGTTTTTTGGACTCTTTCACCT
 TTGGTGTTCCTTAGTAGTTATGGGAAGAGTCAGCATTATCTAGTGAGAAGTCTGCCTTCTCTTTTCCA
 TTCTGGCTTTTGTGACATGGTAGCCCGACCATCTATGGGACTTGTAGCCAACACAAAGCCAATAAGACC
 TCGAATCAGTATTTCTTGGCGCTTCCGTTGTTGCAATGGAGTGTGCATATGCTAGCACCTTTATCC
 ACTACCTATGTTGGATTCTGTCTATGCGGGATTCTTTGGATTGCCTTCGGGTGGCTCAGCTCCGAT
 TGTTTGAAACATTGATGGACCTTGTGGACCCAGAGGTTCTCCAGCGCTGTGGGATTGGTACCATTTGT
 GGAATGCTGTCCCTGCTCCTGGGGCCACCACTTTTAGGTCGGCTCAATGACATGTATGGAGACTACAAA
 TACACATACTGGGCATGTGGCGTCGTCCTAATTATTTAGGTATCTATCTCTTATTGGCATGGGCATCA
 ATTATCGACTTTTGGCAAAGAACAGAAAGCAAACGAGCAGAAAAAGAAAGTAAAGAGGAAGAGACCAG
 TATAGATGTTGCTGGGAAGCCAAATGAAGTTACCAAAGCAGCAGAATCTCCAGACCAGAAAGACACAGAT
 GGAGGGCCCAAGGAGGAGAAAGTCCAGTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

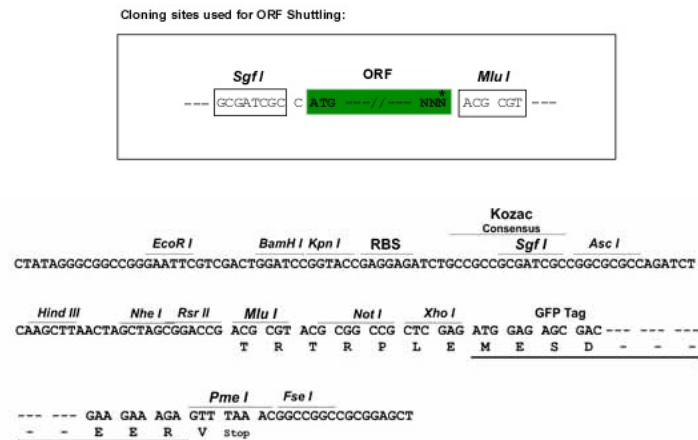
>RG205213 representing NM_003051
 Red=Cloning site Green=Tags(s)

MPPAVGGPVGYTPPDGGWGWAVVIGAFISIGFSYAFPKSITVFFKEIEGIFHATTSEVSWISSIMLAVMY
 GGGPISSILVNKYGSRIVMIVGGCLSGCGLIAAFCNTVQQLYVCIGVIGLGLAFNLNLPALTMIGKYFY
 KRRPLANGLAMAGSPVFLCTLAPLNQVFFGIFGWRGSFLILGLLLLNCCVAGALMRPIGPKPTKAGDKS
 KASLEKAGKSGVKDLHDANTDLIGRHPKQEKRSVFQINQFLDLTLFTHRGFLLYLSGNVIMFFGLFAP
 LVFLSSYGKSKHYSSEKSAFLLSILAFVDMVARPSMGLVANTKPIRPRIQYFFAASVVANGVCHMLAPLS
 TTYVGFVYAGFFGFAGWLVSVLFTLMDLVGPQRFSSAVGLVTIVECCPVLLGPPLLGRLLNDMYGDYK
 YTYWACGVVLIISGIYLFIMGINYRLLAKEQKANEQKESKEEETSIDVAGKPNVTKAAESPDQKDTD
 GGPKEEESPV

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_003051

ORF Size: 1500 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_003051.3](#), [NP_003042.3](#)

RefSeq Size: 3927 bp

RefSeq ORF: 1503 bp

Locus ID: 6566

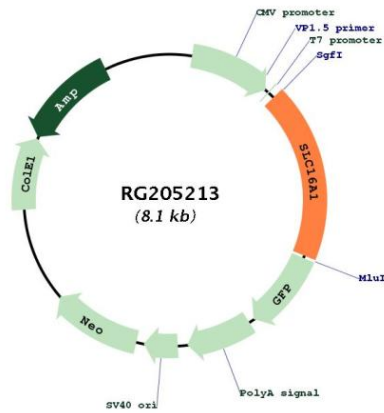
UniProt ID: [P53985](#)

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 RG205213