

Product datasheet for RC200995

Mutarotase (GALM) (NM_138801) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mutarotase (GALM) (NM_138801) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mutarotase
Synonyms:	BLOCK25; GALAC4; GLAT; HEL-S-63p; IBD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200995 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTTCGGTGACCAGGGCCGTGTTTGGAGAGCTGCCCTCGGGAGGAGGGACAGTGGAGAAGTTCAGC
TGCAGTCAGACCTCTTGAGAGTGGACATCATCTCCTGGGGCTGCACGATCACAGCCCTAGAGGTCAAAGA
CAGGCAGGGGAGAGCCTCGGACGTGGTGGCTTGGCTTCCCGAGTTGGAAGGATACCTCCAAAAGCAGCCA
TACTTTGGAGCAGTTATTGGGAGGGTGGCCAACCGAATCGCCAAAGGAACCTTCAAGGTGGATGGGAAGG
AGTATCACCTGGCCATTAACAAGGAACCCAACAGTCTGCATGGAGGAGTCAGAGGGTTTGATAAAGTGCT
CTGGACCCCTCGGGTGTGTCAAATGGCGTCCAGTTCTCGCGCATCAGTCCAGATGGTGAAGAAGGCTAC
CCCGGAGAGTTAAAAGTCTGGGTGACATACACCCTGGATGGCGGAGAGCTCATAGTCAACTACAGAGCAC
AAGCCAGTCAGGCCACACCAAGTCAACCTGACCAACCATTCTTACTTCAACCTGGCAGGCCAGGCTTCCCC
AAATATAAATGACCATGAAGTCACCATAGAAGCGGATACTTATTTGCCTGTGGATGAAACCTGATTCTCT
ACAGGAGAAGTTGCCCCAGTGAAGGCACTGCATTGACCTGAGAAAGCCAGTGGAGCTTGGAAAACACC
TGCAGGACTTCCATCTCAATGGTTTTGACCACAATTTCTGTCTGAAGGGATCTAAAGAAAAGCATTTTTG
TGCAAGGGTGCATCATGCTGCAAGCGGGCGGGTACTAGAAGTATACACCACCCAGCCCGGGTCCAGTTT
TACACGGGCAACTTCTGGATGGCACATTAAGGGCAAGAATGGAGCTGTCTATCCCAAGCACTCCGGTT
TCTGCCTGGAGACTCAGAACTGGCCTGATGCAGTCAATCAGCCCCGCTTCCCTCCTGTGTCTGAGGCC
TGGTGAGGAGTATGACCACACCCTGGTTCAAGTTTTCTGTGGCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200995 protein sequence
Red=Cloning site Green=Tags(s)

MASVTRAVFGELPSGGGTVEKFQLQSDLLRVDIISWGCTITALEVKDRQGRASDVVLGFAELEGYLQKQP
 YFGAVIGRVANRIAKGTFKVDGKEYHLAINKEPNLSHGGVRFDFKVLWTPRVL SNGVQFSRISPDGEEGY
 PGELKVVWVYTTLDGGELIVNYRAQASQATPVNLTNHSYFNLAGQASPNINDHEVTIEADTYLPVDETLIP
 TGEVAPVQGTAFDLRKPVELGKHLQDFHLNGFDHNFCLKGSKEKHF CARVHHAASGRVLEVYTTQPGVQF
 YTGNFLDGT LKGN GAVYPKHS GF CLETQNWPD AVNQPRFPVLLRPGE EYDHTTWFKFSVA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6418_b05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_138801

ORF Size: 1026 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_138801.3](#)

RefSeq Size: 2483 bp

RefSeq ORF: 1029 bp

Locus ID: 130589

UniProt ID: [Q96C23](#)

Cytogenetics: 2p22.1

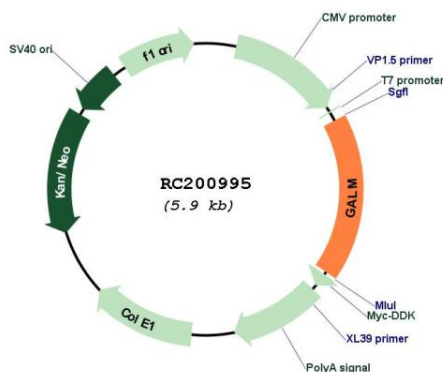
Domains: Aldose_epim

Protein Pathways: Glycolysis / Gluconeogenesis

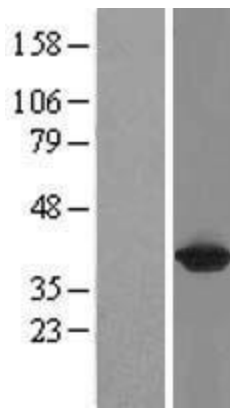
MW: 37.8 kDa

Gene Summary: This gene encodes an enzyme that catalyzes the epimerization of hexose sugars such as glucose and galactose. The encoded protein is expressed in the cytoplasm and has a preference for galactose. The encoded protein may be required for normal galactose metabolism by maintaining the equilibrium of alpha and beta anomers of galactose.[provided by RefSeq, Mar 2009]

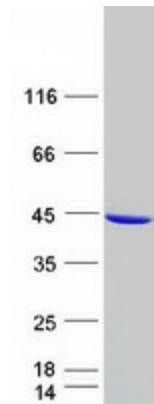
Product images:



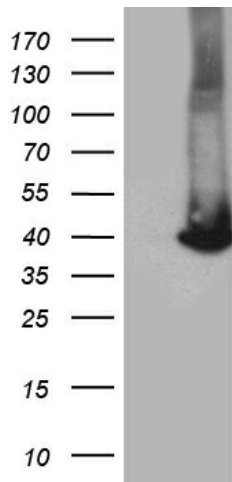
Circular map for RC200995



Western blot validation of overexpression lysate (Cat# [LY408487]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200995 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GALM protein (Cat# [TP300995]). The protein was produced from HEK293T cells transfected with GALM cDNA clone (Cat# RC200995) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GALM (Cat# RC200995, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GALM (Cat# [TA812316]). Positive lysates [LY408487] (100ug) and [LC408487] (20ug) can be purchased separately from OriGene.