

Product datasheet for **RC224613**

Fucose mutarotase (FUOM) (NM_198472) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fucose mutarotase (FUOM) (NM_198472) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Fucose mutarotase
Synonyms:	C10orf125; FucM; FUCU
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224613 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTGGCGCTGAAGGGTGTCCCGCACTGCTGTCCCGGAGCTGCTCTACGCGCTGGCGGGATGGGGC
 ACGGGGACGAGATCGTTCTTGGGACTTGAACCTCCCGGCTCCTCCATCTGCCAGTGTGGGCCCATGGA
 GATCCGTGCAGACGGCTGGGCATCCCGCAGCTCCTGGAGCCGTGCTGAAGCTGCTGCCCTGGACACC
 TATGTGGAGAGTCCGGTGCAGTCATGGAGCTGGTGCCAGCGACAAGGAGAGGGGCTGCAGACCCAG
 TGTGGACGGAGTACGAGTCCATCCTACGCAGGGCCGGCTGTGTGAGAGCCCTGGCAAAGATAGAGAGTT
 TGAGTTTATGAACGGGCTAAGAAGGCTTTTGCTGTTGTGGCAACGGGATGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC224613 protein sequence Red=Cloning site Green=Tags(s)
	MVALKGVPELLSPELLYALARMGHGDEIVLADLNFPASSICQCGPMEIRADGLGIPQLLEAVLKLLPLDT YVESPAAVMELVPSDKERGLQTPVWTEYESILRRAGCVRALAKIERFEFYERAKKAFVAVTGC TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6440_e10.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:



ACCN: NM_198472

ORF Size: 402 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_198472.3](#)

RefSeq Size: 768 bp

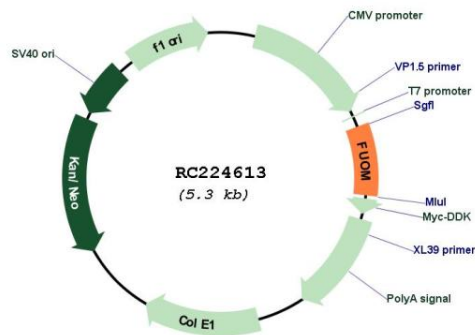
RefSeq ORF: 405 bp

Locus ID: 282969
 UniProt ID: [A2VDF0](#)
 Cytogenetics: 10q26.3

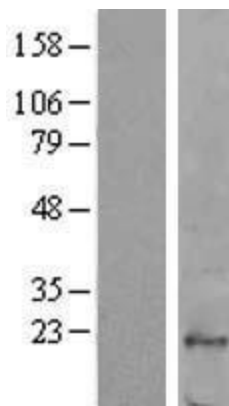
MW: 14.6 kDa

Gene Summary: Involved in the interconversion between alpha- and beta-L-fucoses. L-Fucose (6-deoxy-L-galactose) exists as alpha-L-fucose (29.5%) and beta-L-fucose (70.5%), the beta-form is metabolized through the salvage pathway. GDP-L-fucose formed either by the de novo or salvage pathways is transported into the endoplasmic reticulum, where it serves as a substrate for N- and O-glycosylations by fucosyltransferases. Fucosylated structures expressed on cell surfaces or secreted in biological fluids are believed to play a critical role in cell-cell adhesion and recognition processes.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC224613



Western blot validation of overexpression lysate (Cat# [LY404908]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224613 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).