

Product datasheet for RC235913

OriGene Technologies, Inc.

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Fucose mutarotase (FUOM) (NM_001301827) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Fucose mutarotase (FUOM) (NM_001301827) 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 >RC235913 representing NM_001301827
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGTGGCGCTGAAGGGTGTCCCCGCACTGCTGTCCCCCGAGCTGCTCTACGCGCTGGCGGGGTGGGGCACGGGGGACGAGATCGGGCATCCCGCAGCTCCTGGAGGCCGTGCTGAAGCTGCCCCTGGACACCCTATGTGGAGAGTCCGGCTGCAGTCATGGAGCTGGTGCCCAGCGACAAGGAGAGGGGCCTGCAGACCCCAGTGTGGACGGAGTACGAGTCCATCCTACGCAGGGCCGGCTGTGTGAGAGCCCTGGCAAAGATAGAGAGGTTTGAGTTTTATGAACGGGCTAAGAAGGCTTTTGCTGTTGTGGCAACGGGGGAGACGGCCCTCTACGGAAACCTCATCCTCAGGAAGGGGTGCTTGCCCTCAACCCCCTGCTG

 ${\color{red} \textbf{ACGCGT}} \textbf{ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT}$

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC235913 representing NM_001301827

Red=Cloning site Green=Tags(s)

MVALKGVPALLSPELLYALARMGHGDEIGLGIPQLLEAVLKLLPLDTYVESPAAVMELVPSDKERGLQTP

VWTEYESILRRAGCVRALAKIERFEFYERAKKAFAVVATGETALYGNLILRKGVLALNPLL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

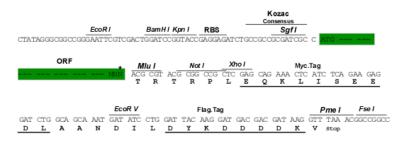
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM 001301827

ORF Size: 393 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.

RefSeg: NM 001301827.2

RefSeq Size: 630 bp



 RefSeq ORF:
 396 bp

 Locus ID:
 282969

 UniProt ID:
 A2VDF0

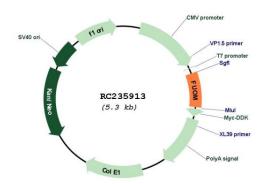
 Cytogenetics:
 10q26.3

 MW:
 14.8 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 RC235913