

Product datasheet for RG235675

OriGene Technologies, Inc.

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Fucose mutarotase (FUOM) (NM_001301828) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Fucose mutarotase (FUOM) (NM_001301828) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: Fucose mutarotase

Synonyms: C10orf125; FucM; FUCU

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG235675 representing NM_001301828.

Sequence: Blue=ORF Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGAGATCCGTGCAGACGGCCTGGGCATCCCGCAGCTCCTGGAGGCCGTGCTGAAGCTGCTGCCCCTG GACACCTATGTGGAGAGTCCGGCTGCAGTCATGGAGCTGGTGCCCAGCGACAAGGAGAGGGGCCTGCAG ACCCCAGTGTGGACGGAGTACGAGTCCATCCTACGCAGGGCCGGCTGTGTGAGAGCCCTGGCAAAGATA GAGAGGTTTGAGTTTTATGAACGGGCTAAGAAGGCTTTTGCTGTTGTGGCAACGGGGGAGACGGCCCTC

TACGGAAACCTCATCCTCAGGAAGGGGGTGCTTGCCCTCAACCCCCTGCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

Protein Sequence: >Peptide sequence encoded by RG235675

Blue=ORF Red=Cloning site Green=Tag(s)

MEIRADGLGIPQLLEAVLKLLPLDTYVESPAAVMELVPSDKERGLQTPVWTEYESILRRAGCVRALAKI

ERFEFYERAKKAFAVVATGETALYGNLILRKGVLALNPLL

TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYYSSVVDSHMHFKSAIHPSILQNGGPMFA

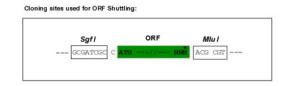
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

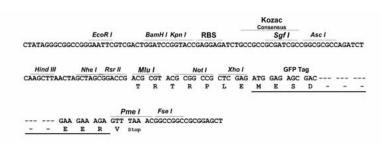
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





ACCN: NM_001301828

ORF Size: 327 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).

RefSeq: <u>NM 001301828.2</u>

 RefSeq Size:
 906 bp

 RefSeq ORF:
 330 bp

 Locus ID:
 282969

 UniProt ID:
 A2VDF0

 Cytogenetics:
 10q26.3

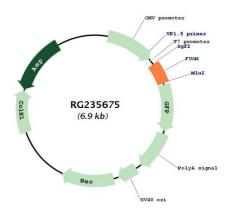
 MW:
 12.6 kDa



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 RG235675