

## Product datasheet for **RG214208**

### Fucose mutarotase (FUOM) (NM\_001098483) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Fucose mutarotase (FUOM) (NM\_001098483) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** FUOM  
**Synonyms:** C10orf125; FucM; FUCU  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG214208 representing NM\_001098483  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGTGGCGCTGAAGGGTGTCCCGCACTGCTGTCCCGGAGCTGCTCTACGCGCTGGCGGGATGGGGC  
 ACGGGGACGAGATCGTTCTTGCGGACTTGAACCTCCCGGCTCCTCCATCTGCCAGTGTGGGCCATGGA  
 GATCCGTGCAGACGGCTGGGCATCCCGCAGCTCCTGGAGCCGTGCTGAAGCTGCTGCCCTGGACACC  
 TATGTGGAGAGTCCGGTGCAGTCATGGAGCTGGTCCCAGCGACAAGGAGAGGGGCTGCAGACCCAG  
 TGTGGACGGAGTACGAGTCCATCTACGAGGGCCGGCTGTGTGAGAGCCCTGGCAAAGATAGAGAGGTT  
 TGAGTTTTATGAACGGGCTAAGAAGGCTTTTGCTGTTGTGGCAACGGGGGAGACGGCCCTACGGAAC  
 CTCATCTCAGGAAGGGGTGCTTGCCCTCAACCCCTGCTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG214208 representing NM\_001098483  
 Red=Cloning site Green=Tags(s)  
 MVALKGVPELLSPELLYALARMGHGDEIVLADLNFPASSICQCGPMEIRADGLGIPQLLEAVLKLLPLDT  
 YVESPAVMELVPSDKERGLQTPVWTEYESILRRAGCVRALAKIERFEFYERAKKAFVAVATGETALYGN  
 LILRKVLAALNPLL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI

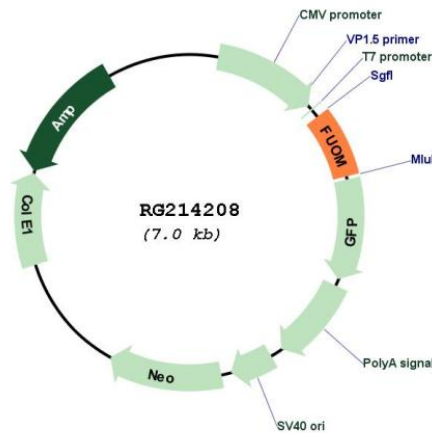


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Cloning Scheme:



Plasmid Map:



ACCN: NM\_001098483

ORF Size: 462 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.

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Components:</b>            | 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).                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>                                                                                                               |
| <b>RefSeq:</b>                | <u>NM_001098483.3</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>RefSeq Size:</b>           | 562 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>RefSeq ORF:</b>            | 465 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Locus ID:</b>              | 282969                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>UniProt ID:</b>            | <u>A2VDF0</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Cytogenetics:</b>          | 10q26.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Gene Summary:</b>          | 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] |