

Product datasheet for **RG200786**

POFUT1 (NM_172236) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: POFUT1 (NM_172236) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: POFUT1
Synonyms: DDD2; FUT12; O-Fuc-T; O-FucT-1; O-FUT; OFUCT1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG200786 representing NM_172236
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGCGCCGCCGCTGGGCACGGCCGCTGAGCGTGTCTTTCCTGCTGCTGCTTCTGCCGCTCCCGGGA
 TGCCTGCGGGCTCCTGGACCCGGCGTTACCTGCTCTACTGCCCTGCATGGGCGCTTTGGGAACCA
 GGCCGATCACTTCTGGGCTCTCTGGCATTGCAAAGCTGCTAAACCGTACCTGGCTGTCCCTCCTGG
 ATTGAGTACCAGCATACAAGCCTCTTACCAACCTCCATGTGCTCCTACCAGAAGTACTTCAAGCTGG
 AGCCCCCAGGCTTACCATCGGGTCATCAGCTTGGAGGATTTTCATGGAGAAGCTGGCACCCACCCACTG
 GCCCCTGAGAAGCGGGTGGCATACTGCTTTGAGGTGGCAGCCAGCGAAGCCAGATAAGAAGAGCTGC
 CCCATGAAGGAAGAAACCCCTTGGCCATTCTGGGATCAGTTTCATGTGAGTTCAACAAGTCCGAGC
 TTTTACAGGCATTTCTTCAGTGCTTCTACAGAGAACAATGGAGCCAGAGGCGTGAGAATCACTCCTG
 TGTACCTTACTCTTCCAAGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG200786 representing NM_172236
 Red=Cloning site Green=Tags(s)

MGAAAWARPLSVSFLLLLLPLPGMPAGSWDPAGYLLYCPCMRFGNQADHFLGSLAFAKLLNRTLAVPPW
 IEYQHHKPPFTNLHVSQYKFKLEPLQAYHRVISLEDFMEKLAPTHWPPEKRVAYCFEVAARSPDKKTC
 PMKEGNPFGPFDQFHVSFNKSELTGIFSASYREQWSQRRENHSCVTLLFPR

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

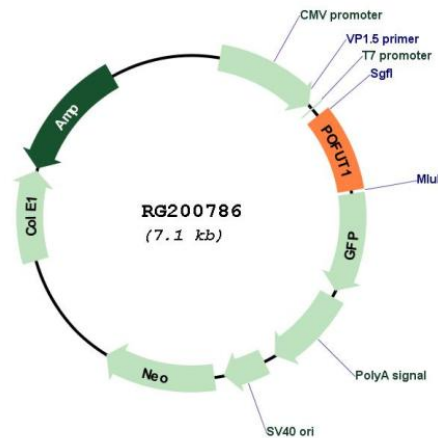


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Cloning Scheme:



Plasmid Map:



ACCN: NM_172236

ORF Size: 582 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_172236.2](#)

RefSeq Size: 1524 bp

RefSeq ORF: 585 bp

Locus ID: 23509

UniProt ID: [Q9H488](#)

Cytogenetics: 20q11.21

Protein Families: Druggable Genome, Transcription Factors

Gene Summary: This gene encodes a member of the glycosyltransferase O-Fuc family. This enzyme adds O-fucose through an O-glycosidic linkage to conserved serine or threonine residues in the epidermal growth factor-like repeats of a number of cell surface and secreted proteins. O-fucose glycans are involved in ligand-induced receptor signaling. Alternative splicing of this gene results in two transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]