

Product datasheet for **RG207119**

FPGT (NM_003838) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FPGT (NM_003838) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FPGT
Synonyms:	GFPP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG207119 representing NM_003838
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCAGCTGCTAGGGACCTCCGGAAGTATCGCTGCGAGAAGCCACCCAGCGAAAAATTGCGGAGGTTTT
 CCGAGCTAAGAGGCAAACCTGTAGCACGTGGAGAATTCTGGACATAGTTGCAATAACAGCGGCTGATGA
 AAAACAGGAACCTGCTTACAACCAACAGCTGTGAGAAAAGCTGAAAAGAAAGGAGTTACCCCTTGAGTT
 CAATATCACGTTTTTGTAGATCCTGCTGGAGCCAAAATTGAAAATGGAGGATCAACACTTTGTGCCCTTC
 AATGTTTTGAAAAGCTATATGGAGATAAATGGAATCTTTTACCATCTTATTAATCACTCTGGTGGCTA
 CAGTCAACGACTTCCAAATGCAAGTCTCTGGGAAAAATTTCACTGCTTACCTCTTGTAACCCATT
 TATCAGATGCTAGAATAAAAGTACCATGTACATTGATTTCCCTTAAATATGAATCCTGGAATCTGG
 TTACCTGTGCAGATGATTTGAACCTTATAGTATTGGAGAATTTGAGTTTATTAGGTTTGACAAACCTGG
 CTTTACTGCTTTAGCTCATCCTTCTAGTTTGACGATAGGTACCACACATGGAGTATTTGTCTTAGATCCT
 TTTGATGATTTAAAACATAGAGACCTTGAATACAGGTCTTGCCATCGTTTCTTCATAAGCCAGCATAG
 AAAAGATGTATCAGTTTAAATGCTGTGTGTAGACCTGGAATTTTTGTCAACAGGACTTTGCTGGGGTGA
 CATTGCCGATCTTAAATAGACTCTGACTATGTCTACACAGATAGCCTATTTTATATGGATCATAAATCA
 GCAAAAATGTTACTTGCTTTTTATGAAAAAATAGGCACACTGAGCTGTGAAATAGATGCCTATGGTGACT
 TTCTGCAGGCTTTGGGACCTGGAGCAACTGTGGAGTACACCAGAAACACATCAAATGTCATTAAGAAGA
 GTCAGAGTTGGTAGAAATGAGGCAGAGAATATTTATCTTCTTAAAGGAACATCACTAAATGTTGTTGTT
 CTTAATAACTCCAAATTTTATCACATTGGAACAACCGAAGAATATTTGTTTTACTTTACCTCAGATAACA
 TTTAAAGTCAGAGCTCGGCTTACAGTCCATAACTTTTAGTATCTTTCCAGATATACCAGAATGCTCTGG
 CAAAACATCCTGTATCATTCAAAGCATACTGGATTCAAGATGTTCTGTGGCACCTGGCTCAGTTGTGGAG
 TATCCAGATTGGGCTGATGTTTCAGTTGGGAAAACTGCATTATTAGTGGTCTTACATCCTAACAA
 AAGCTGCCCTCCCGCACATTCTTTGTATGTTCTTAAGCTTAAAGATGAATAGATGCTTAAAGTATGC
 AACTATGGCATTGGAGTGAAGACAACCTGAAAAAGAGTGTGAAAACATTGTCAGATATAAAGTACTT
 CAATCTTTGGAGTCTGTTTCTGTGATGCTTAGATGTTTGAATCTTAAAGTTACAGAGGAAGTCTTCT
 CTGGTAAACAGACATGTCTGAGTTTGTGGACTGCACGCATTTCCAGTTTGTCTTCTTTGAGTGACTC
 AGTTATAACATCCCTAAAGATGTTAAATGCTGTTAAGAACAAGTCAGCATTACGCTGAATAGCTATAAG
 TTGCTGTCCATTGAAGAAATGCTTATCTACAAAGATGTAGAAGATATGATAACTTACAGGGAACAAATTT
 TTCTAGAAATCAGTTTAAAAAGCAGTTTGATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG207119 representing NM_003838
 Red=Cloning site Green=Tags(s)

MAAARDPPEVSLREATQRKLRRFSELRGKLVARGEFDIIVAITAADKQELAYNQQLSEKLRKELPLGV
 QYHVFVDPAGAKIGNGGSTLQALQCLEKLYGDKWNSFTILLIHSGGYSQRLPNASALGIFTALPLGNPI
 YQMLELKLAMYIDFPLNMNPGILVTCADDIELYSIGEFEFIRFDKPGFTALAHPSSTLIGTTHGVFLDP
 FDDLKHRDLEYRSCHRFLHKPSIEKMYQFNAVCRPGNFCQQDFAGGDIADLKLDSYVYTDLSFYMDHKS
 AKMLLAFYEKIGTLSCEIDAYGDFLQALGPGATVEYTRNTSNVIKEESELVEMRQRIFHLLKGTSLNVVV
 LNNSKFYHIGTTEEYLFYFTSDNSLKSELGLQSIITFSIFPDIPECSGKTSIIQSILDSRCSVAPGSVVE
 YSRLGPDVSVGENCIISGSYILTKAALPAHSFVCSLSLKMNRCLKYATMAFGVQDNLKKSVKTLSDIKLL
 QFFGVCFSLCLDVWNLKYTEELFSGNKTCLESLWTARIFPVCSSLSDSVITSLKMLNAVKNKSAFSLNSYK
 LLSIEEMLIYKDVEDMITYREQIFLEISLKSSLM

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_003838

ORF Size: 1782 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_003838.2](#), [NP_003829.2](#)

RefSeq Size: 3426 bp

RefSeq ORF: 1785 bp

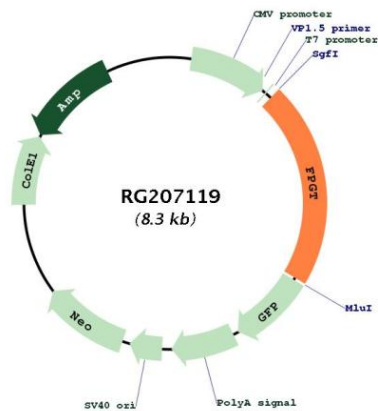
Locus ID: 8790

UniProt ID: [O14772](#)

Cytogenetics: 1p31.1

- Protein Pathways:** Amino sugar and nucleotide sugar metabolism, Fructose and mannose metabolism, Metabolic pathways
- Gene Summary:** L-fucose is a key sugar in glycoproteins and other complex carbohydrates since it may be involved in many of the functional roles of these macromolecules, such as in cell-cell recognition. The fucosyl donor for these fucosylated oligosaccharides is GDP-beta-L-fucose. There are two alternate pathways for the biosynthesis of GDP-fucose; the major pathway converts GDP-alpha-D-mannose to GDP-beta-L-fucose. The protein encoded by this gene participates in an alternate pathway that is present in certain mammalian tissues, such as liver and kidney, and appears to function as a salvage pathway to reutilize L-fucose arising from the turnover of glycoproteins and glycolipids. This pathway involves the phosphorylation of L-fucose to form beta-L-fucose-1-phosphate, and then condensation of the beta-L-fucose-1-phosphate with GTP by fucose-1-phosphate guanylyltransferase to form GDP-beta-L-fucose. Alternative splicing results in multiple transcript variants. Read-through transcription also exists between this gene and the neighboring downstream TNNI3 interacting kinase (TNNI3K) gene. [provided by RefSeq, Dec 2010]

Product images:



Circular map for RG207119