

Product datasheet for **RG236351**

FPGT (NM_001199329) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FPGT (NM_001199329) 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)
ORF Nucleotide Sequence:	>RG236351 representing NM_001199329. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGCGTGTGTGCGGCGCGGTCTCAGGGAAGGTGGGGCTATGGCAGCTGCTAGGGACCTCCGGAAGTA
TCGCTGCGAGAAGCCACCCAGCGAAAAATTGCGGAGTTTTCCGAGCTAAGAGGCAAACCTGTAGCACGT
GGAGAATTCTGGACATAGTTGCAATAACAGCGGCTGATGAAAAACAGGAACTTGCTTACAACCAACAG
CTGTCAGAAAAGCTGAAAAGAAAGGAGTTACCCCTTGGAGTTCAATATCACGTTTTGTGGATCCTGCT
GGAGCCAAAATTGAAAATGGAGGATCAACACTTGTGCCCTTCAATGTTGGAAAAGCTATATGGAGAT
AAATGGAATTCTTTACCATCTTATTAATTCACCTGTATCTTTCCAGATATACCAGAATGCTCTGGCA
AAACATCCTGTATCATTCAAAGCATACTGGATTCAAGATGTTCTGTGGCACCTGGCTCAGTTGTGGAGT
ATTCCAGATTGGGGCCTGATGTTTCAGTTGGGGAAAACGCATTATTAGTGGTCTTACATCC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG236351
Blue=ORF Red=Cloning site Green=Tag(s)

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MRAVRRGLREGGMAAARDPPEVSLREATQRKLRRFSELRGLVARGEFDIVAITAADEKQELAYNQQ
LSEKLKRKELPLGVQYHVFVDPAGAKIGNGGSTLCALQCLEKLYGDKWNSFTILLIHSVSFQIYQNALA
KHPVSVFKAYIQDVLWHLAQLWSIPDWGLMFQLGKTALLVVLTS
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLVHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites: SgfI-MluI

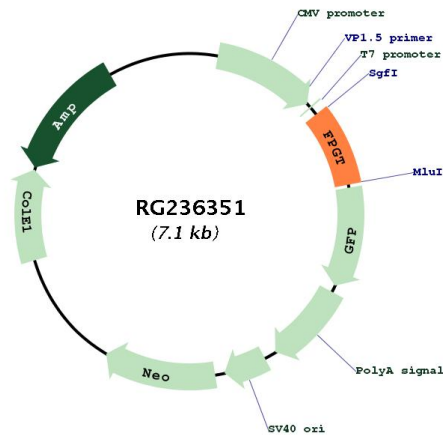


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001199329

ORF Size: 546 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:	NM_001199329.2 , NP_001186258.2
RefSeq Size:	3905 bp
RefSeq ORF:	510 bp
Locus ID:	8790
UniProt ID:	O14772
Cytogenetics:	1p31.1
Protein Pathways:	Amino sugar and nucleotide sugar metabolism, Fructose and mannose metabolism, Metabolic pathways
MW:	21 kDa
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]