

Product datasheet for SC334245

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

OriGene Technologies, Inc.

CN: techsupport@origene.cn

FPGT (NM_001199329) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: FPGT (NM_001199329) Human Untagged Clone

Tag: Tag Free
Symbol: FPGT
Synonyms: GFPP

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001199329, the custom clone sequence may differ by one or

more nucleotides

Restriction Sites: Sgfl-Mlul

ACCN: NM 001199329

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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: <u>NM 001199329.2</u>, <u>NP 001186258.2</u>

 RefSeq Size:
 3905 bp

 RefSeq ORF:
 549 bp

 Locus ID:
 8790

 UniProt ID:
 014772

 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]

Transcript Variant: This variant (2) uses an alternate splice site in the 3' coding region, which results in a frameshift, compared to variant 1. It encodes isoform 2, which has a shorter and distinct C-terminus, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.