

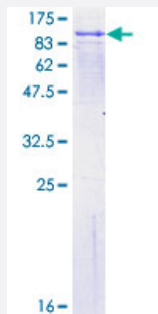
Full-Length

FPGT (Human) Recombinant Protein (P01)

Catalog # H00008790-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human FPGT full-length ORF (NP_003829.2, 1 a.a. - 594 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MAAARDPPEVSLREATQQRKLRRFSELRGKLVARGEFDWDVAITAADKQELAYNQQLSEKLKRKE
LPLGVQYHVFVDPAGAKIGNGGSTLCALQCLEKLYGDKWNSFTILLHSGGYSQRLPNASALGKIFT
ALPLGNPIYQMELKCLAMYIDFPLNMNPGILVTCADDIELYSIGEFEFIRFDKPGFTALAHPSSTIGTT
HGVFVLDPFDDLKHRDLEYRSCHRFLHKPSIEKMYQFNAVCRPGNFCQQDFAGGDIADLKLDSD
VYVTDLSLFYMDHKSAMLLAFYEKIGTSLCEIDAYGDFLQALGPGATVEYTRNTSNVKEESELVEM
RQRIFHLLKGTSLNVVVLNNSKFYHIGTTEEYLFYFTSDNSLKSELGLQSITFSIFPDIEPCSGKTSCII
QSILDSRCSVAPGSVVEYSRLGPDVSVGENCIISGSYILTKAALPAHSFVCSLSLKMNRCLKYATM
AFGVQDNLKKS VKTLSDIKLLQFFGVCFSLCLDVWNLKVTEELFSGNKTCLSLWTARIFPVCS
SDSVITSLKMLNAVKNKSAFSLNSYKLLSIEEMLYKDVEDMITYREQIFLEISLKSSLM

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

93

Interspecies Antigen Sequence

Mouse (75); Rat (72)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — FPGT

Entrez GeneID	8790
GeneBank Accession#	NM_003838.2
Protein Accession#	NP_003829.2
Gene Name	FPGT
Gene Alias	GFPP
Gene Description	fucose-1-phosphate guanylyltransferase
Omim ID	603609
Gene Ontology	Hyperlink

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. [provided by RefSeq]

Other Designations

GDP-beta-L-fucose pyrophosphorylase|OTTHUMP00000011173|fucose-1-phosphate guanylyltransferase

Pathway

- [Amino sugar and nucleotide sugar metabolism](#)
- [Fructose and mannose metabolism](#)
- [Metabolic pathways](#)