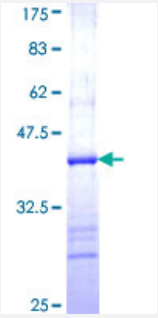
FPGT (Human) Recombinant Protein (Q01)

Catalog # H00008790-Q01 Size 25 ug, 10 ug

Applications



Specification

Product Description	Human FPGT partial ORF (NP_003829, 1 a.a. - 109 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	MAAARDPPEVSLREATQRKLRRFSELRGKLVARGEFWDIVAITAADEKQELAYNQQLSEKLKRKELPLGVQYHVFVDPAGAKIGNGGSTLCALQCLEKLYGDKWNSFTI
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	37.73
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
Protein Accession#	NP_003829
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 guanyltransferase

Pathway

- Amino sugar and nucleotide sugar metabolism
- Fructose and mannose metabolism
- Metabolic pathways