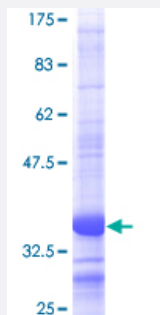


PFKM (Human) Recombinant Protein (Q01)

Catalog # H00005213-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human PFKM partial ORF (NP_000280, 681 a.a. - 780 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	AKAMNWMSGKIKESYRNGRIFANTPDSGCVLGMKRKRALVFQPV AELKDQTD FEHRIPKEQWWLK LRPILKILAKYEIDLDTSDHAHLEHITKRSGEAAV
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.74
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 — PFKM

Entrez GeneID [5213](#)

GeneBank Accession# [NM_000289](#)

Protein Accession# [NP_000280](#)

Gene Name PFKM

Gene Alias GSD7, MGC8699, PFK-1, PFK-M, PFKX

Gene Description phosphofructokinase, muscle

Omim ID [232800 610681](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The PFKM gene encodes the muscle isoform of phosphofructokinase (PFK) (ATP:D-fructose-6-phosphate-1-phosphotransferase, EC 2.7.1.11). PFK catalyzes the irreversible conversion of fructose-6-phosphate to fructose-1,6-bisphosphate and is a key regulatory enzyme in glycolysis. Mammalian PFK is a tetramer made up of various combinations of 3 subunits: muscle (PFKM), liver (PFKL; MIM 171860), and platelet (PFKP; MIM 171840), the genes for which are located on chromosomes 12q13, 21q22, and 10p, respectively. The composition of the tetramers differs according to the tissue type. Muscle and liver PFK are homotetramers of 4M and 4L subunits, respectively. Erythrocytes contain both L and M subunits, which randomly tetramerize to form M4, L4, and M3L, M2L2, and ML3 hybrid forms of the holoenzyme (Vora et al., 1980 [PubMed 6444721]; Raben and Sherman, 1995 [PubMed 7550225]).[supplied by OMIM]

Other Designations phosphofructokinase, muscle type|phosphofructokinase, polypeptide X

Pathway

- [Biosynthesis of alkaloids derived from histidine and purine](#)

- [Biosynthesis of alkaloids derived from ornithine](#)
- [Biosynthesis of alkaloids derived from shikimate pathway](#)
- [Biosynthesis of alkaloids derived from terpenoid and polyketide](#)
- [Biosynthesis of phenylpropanoids](#)
- [Biosynthesis of plant hormones](#)
- [Biosynthesis of terpenoids and steroids](#)
- [Fructose and mannose metabolism](#)
- [Galactose metabolism](#)
- [Glycolysis / Gluconeogenesis](#)
- [Metabolic pathways](#)
- [Pentose phosphate pathway](#)

Disease

- [Drug Toxicity](#)
- [Edema](#)
- [Hypercholesterolemia](#)
- [Tobacco Use Disorder](#)