G-Biosciences Image not found or type unknown

Immunotag™ PFKM Polyclonal Antibody

Antibody Specification

Catalog No.	ITT3680
Product Description	Immunotag™ PFKM Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PFKM
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from the Internal region of human PFKM
Specificity	PFKM Polyclonal Antibody detects endogenous levels of PFKM protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	PFKM
Accession No.	P08237 P47857 P47858
Alternate Names	PFKM; PFKX; 6-phosphofructokinase; muscle type; Phosphofructo-1-kinase isozyme A; PFK-A; Phosphofructokinase-M; Phosphofructokinase 1; Phosphohexokinase

Antibody Specification

Description	phosphofructokinase, muscle(PFKM) Homo sapiens Three phosphofructokinase isozymes exist in humans: muscle, liver and platelet. These isozymes function as subunits of the mammalian tetramer phosphofructokinase, which catalyzes the phosphorylation of fructose-6-phosphate to fructose-1,6-bisphosphate. Tetramer composition varies depending on tissue type. This gene encodes the muscle-type isozyme. Mutations in this gene have been associated with glycogen storage disease type VII, also known as Tarui disease. Alternatively spliced transcript variants have been described.[provided by RefSeq, Nov 2009],
Cell Pathway/ Category	Glycolysis / Gluconeogenesis,Pentose phosphate pathway,Fructose and mannose metabolism,Galactose metabolism,
Protein Expression	Brain,Liver,Muscle,Skeletal muscle,Thymus,
Subcellular Localization	cytoplasm,cytosol,6-phosphofructokinase complex,apical plasma membrane,extracellular exosome,sperm principal piece,
Protein Function	catalytic activity:ATP + D-fructose 6-phosphate = ADP + D-fructose 1,6-bisphosphate.,cofactor:Magnesium.,disease:Defects in PFKM are the cause of glycogen storage disease type 7 (GSD7) [MIM:232800]; also known as Tarui disease. GSD7 is an autosomal recessive disorder characterized by exercise intolerance with associated nausea and vomiting. Short bursts of intense activity are particularly difficult. Severe muscle cramps and myoglobinuria develop after vigorous exercise. Most patients obtain a "second wind" when the onset of exercise is followed by a brief rest period. In time patients adjust their activity level and are well compensated.,enzyme regulation:Allosteric enzyme activated by ADP, AMP, or fructose bisphosphate and inhibited by ATP or citrate.,miscellaneous:In human PFK exists as a system of 3 types of subunits, PFKM (muscle), PFKL (liver) and PFKP (platelet) isoenzymes.,pathway:Carbohydrate degradation; glycolysis; D-glyceraldehyde 3-phosphate and glycerone phosphate from D-glucose: step 3/4.,similarity:Belongs to the phosphofructokinase family. Two domains subfamily.,subunit:Tetramer. Muscle is M4, liver is L4, and red cell is M3L, M2L2, or ML3.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.