



PFKM Polyclonal Antibody

Catalog No	YP-Ab-14902
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	PFKM
Protein Name	6-phosphofructokinase muscle type
Immunogen	The antiserum was produced against synthesized peptide derived from human PFK-1. AA range:320-369
Specificity	PFKM Polyclonal Antibody detects endogenous levels of PFKM protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PFKM; PFKX; 6-phosphofructokinase; muscle type; Phosphofructo-1-kinase isozyme A; PFK-A; Phosphofructokinase-M; Phosphofructokinase 1; Phosphohexokinase
Observed Band	85kD
Cell Pathway	Cytoplasm .
Tissue Specificity	Brain,Liver,Muscle,Skeletal muscle,Thymus,
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.,pathwa

**Background**

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],

matters needing attention

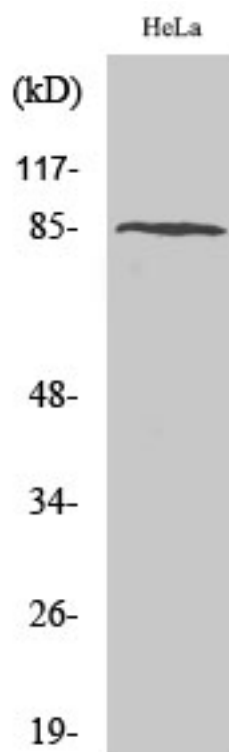
Avoid repeated freezing and thawing!

Usage suggestions

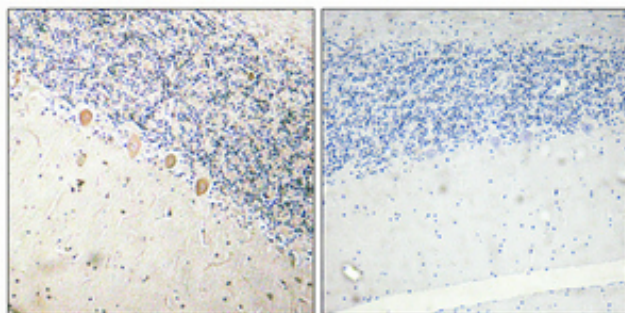
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



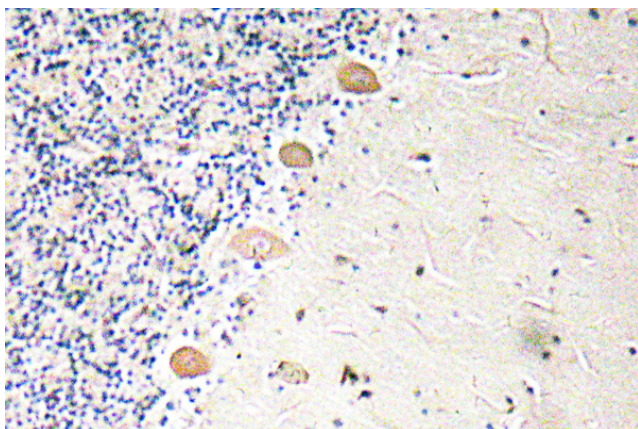
Products Images



Western Blot analysis of various cells using PFKM Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Immunohistochemistry analysis of PFK-1 antibody in paraffin-embedded human brain tissue.



Western blot analysis of lysate from Hela cells, using PFK-1 antibody.