10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Fructose 6 Phosphate Kinase (PFKM) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8137b

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	P08237
Other Accession	Q60HD9
Reactivity	Human
Predicted	Monkey, Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB3908
Calculated MW	85183
Antigen Region	746-776

Additional Information

Gene ID	5213
Other Names	ATP-dependent 6-phosphofructokinase, muscle type {ECO:0000255|HAMAP-Rule:MF_03184}, ATP-PFK {ECO:0000255|HAMAP-Rule:MF_03184}, PFK-M, 27111 {ECO:0000255|HAMAP-Rule:MF_03184}, 6-phosphofructokinase type A, Phosphofructo-1-kinase isozyme A, PFK-A, Phosphohexokinase {ECO:0000255|HAMAP-Rule:MF_03184}, PFKM, PFKX
Target/Specificity	This Fructose 6 Phosphate Kinase (PFKM) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 746-776 amino acids from the C-terminal region of human Fructose 6 Phosphate Kinase (PFKM).
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Fructose 6 Phosphate Kinase (PFKM) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PFKM (HGNC:8877)
Synonyms	PFKX
Function	Catalyzes the phosphorylation of D-fructose 6-phosphate to fructose 1,6-bisphosphate by ATP, the first committing step of glycolysis.
Cellular Location	Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03184}.

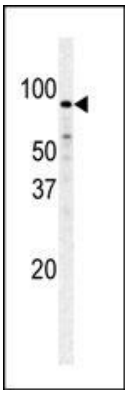
Background

Phosphofructokinase catalyzes the irreversible conversion of fructose 6 phosphate to fructose 1,6 bisphosphate. Mammalian PFK is a complex isozyme consisting of 3 subunits: muscle (M), liver (L), and platelet (P). Only M type PFK isozyme is expressed in mature muscle, while erythrocytes contain both L and M subunits. Defects in PFKM are the cause of glycogen storage disease type 7 (GSD7), also known as Tarui disease.

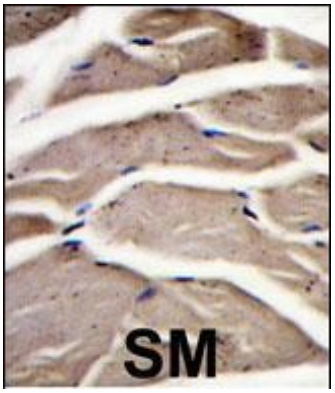
References

Howard, T.D., et al., Genomics 34(1):122-127 (1996).
Vasconcelos, O., et al., Proc. Natl. Acad. Sci. U.S.A. 92(22):10322-10326 (1995).
Raben, N., et al., J. Biol. Chem. 268(7):4963-4967 (1993).
Yamasaki, T., et al., Gene 104(2):277-282 (1991).
Sharma, P.M., et al., J. Biol. Chem. 265(16):9006-9010 (1990).

Images

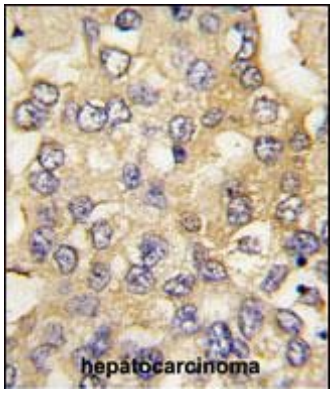


Western blot analysis of PFKM polyclonal antibody (Cat. #AP8137b) in Hela cell line lysate. PFKM(arrow) was detected using the purified Pab.

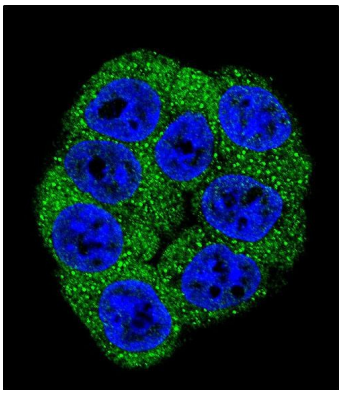


Formalin-fixed and paraffin-embedded human skeletal muscle reacted with PFKM Antibody (C-term)(Cat.#AP8137b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Formalin-fixed and paraffin-embedded human



hepatocarcinoma tissue reacted with PFKM antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of Fructose 6 Phosphate Kinase (PFKM) Antibody(C-term)(Cat#AP8137b) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.