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
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
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}.

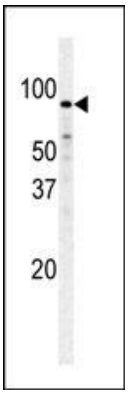
Background

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.

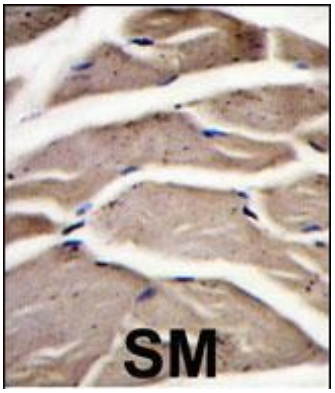
References

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

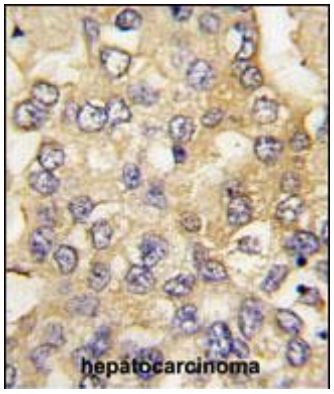


Western blot analysis of PFKM polyclonal antibody (Cat. #AP8137b) in Hela cell line lysate. PFKM(arrow) was detected using the purified Pab.

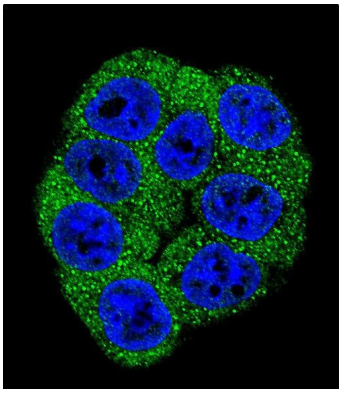


Formalin-fixed and paraffin-embedded human skeletal muscle reacted with PFKM Antibody (C-term)(Cat.#AP8137b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been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