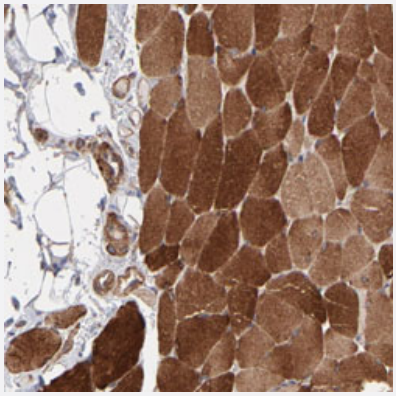
PFKM polyclonal antibody

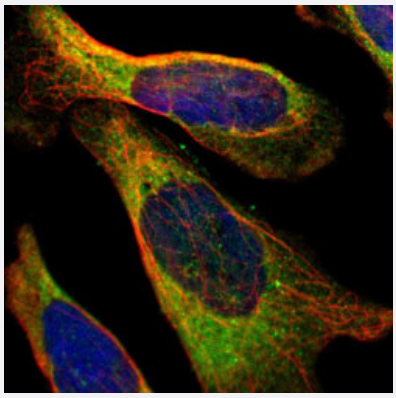
Catalog # PAB29329 Size 100 uL

Applications



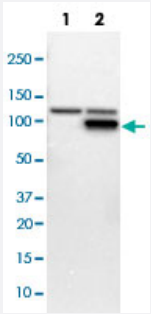
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of human skeletal muscle with PFKM polyclonal antibody (Cat# PAB29329) shows strong cytoplasmic positivity in myocytes at 1:20-1:50 dilution.



Immunofluorescence

Immunofluorescent staining of human cell line U-2 OS with PFKM polyclonal antibody (Cat# PAB29329) under 1-4 ug/mL working concentration shows positivity in endoplasmic reticulum.



Western Blot (Cell lysate)

Western blot analysis of Lane 1: NIH-3T3 cell lysate (Mouse embryonic fibroblast cells); Lane 2: NBT-II cell lysate (Rat Wistar bladder tumour cells) with PFKM polyclonal antibody (Cat# PAB29329) at 1:100-1:250 dilution.

Specification

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Product Description	Rabbit polyclonal antibody raised against recombinant human PFKM.
Immunogen	Recombinant protein corresponding to amino acids of human PFKM.
Sequence	CVQVTKDVTKAMDEKKFDEALKLRGRSFMNNWEVYKLLAHVRPPVSKSGSHTVAVMNVGAPA AGMNAAVRSTVRIGLIQGNRVLVVHDGFEGLAKGQIEEAGWSYVGGWTGQGGSKLGTKRTLPKK SFEQISA
Host	Rabbit
Reactivity	Human, Rat
Form	Liquid
Purification	Antigen affinity purification
Isotype	IgG
Recommend Usage	Immunohistochemistry (1:20-1:50) Western Blot (1:100-1:250) Immunofluorescence (1-4 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.2 (40% glycerol, 0.02% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

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- Immunofluorescence

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Gene Info — PFKM

Entrez GeneID	5213
Protein Accession#	P08237
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 a 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

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- Galactose metabolism
- Glycolysis / Gluconeogenesis
- Metabolic pathways
- Pentose phosphate pathway

Disease

- Drug Toxicity
- Edema
- Hypercholesterolemia
- Tobacco Use Disorder

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