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

PFKFB2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8146a

Product Information

Application	WB, IHC-P, E
Primary Accession	O60825
Reactivity	Human
Predicted	Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	58477
Antigen Region	1-30

Additional Information

Gene ID	5208
Other Names	6-phosphofructo-2-kinase/fructose-2, 6-bisphosphatase 2, 6PF-2-K/Fru-2, 6-P2ase 2, PFK/FBPase 2, 6PF-2-K/Fru-2, 6-P2ase heart-type isozyme, 6-phosphofructo-2-kinase, Fructose-2, 6-bisphosphatase, PFKFB2
Target/Specificity	This PFKFB2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human PFKFB2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	PFKFB2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PFKFB2 (HGNC:8873)
Function	Synthesis and degradation of fructose 2,6-bisphosphate.
Tissue Location	Heart.

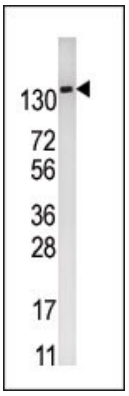
Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The AGC kinase group consists of 63 kinases including the cyclic nucleotide-regulated protein kinase (PKA & PKG) family, the diacylglycerol-activated/phospholipid-dependent protein kinase C (PKC) family, the related to PKA and PKC (RAC/Akt) protein kinase family, the kinases that phosphorylate G protein-coupled receptors family (ARK), and the kinases that phosphorylate ribosomal protein S6 family (RSK).

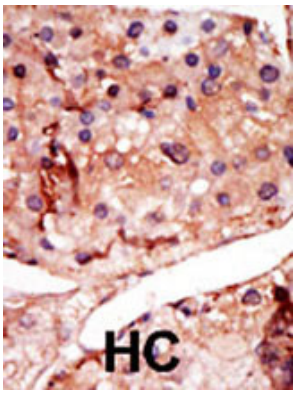
References

Soejima, H., et al., Genomics 74(1):115-120 (2001).
Heine-Suner, D., et al., Eur. J. Biochem. 254(1):103-110 (1998).

Images



Western blot analysis of anti-PFKFB2 Pab (Cat. #AP8146a) in mouse kidney tissue lysate (35ug/lane). PFKFB2(arrow) was detected using the purified Pab



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, 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. BC = breast carcinoma; HC = hepatocarcinoma.

Citations

- HIF-1/AKT Signaling-Activated PFKFB2 Alleviates Cardiac Dysfunction and Cardiomyocyte Apoptosis in Response to Hypoxia
- Expression, regulation and function of phosphofructo-kinase/fructose-biphosphatases (PFKFBs) in glucocorticoid-induced apoptosis of acute lymphoblastic leukemia cells.
- Nuclear targeting of 6-phosphofructo-2-kinase (PFKFB3) increases proliferation via cyclin-dependent kinases.
- Label-free quantitative proteomic analysis of right ventricular remodeling in infant Tetralogy of Fallot patients.

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