

PFKFB4 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8154c

Specification

PFKFB4 Antibody (Center) - Product Information

Application WB, IHC-P,E
Primary Accession Q16877
Other Accession Q4R8B6

Reactivity Human, Mouse

Predicted Monkey
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 266-296

PFKFB4 Antibody (Center) - Additional Information

Gene ID 5210

Other Names

6-phosphofructo-2-kinase/fructose-2, 6-bisphosphatase 4, 6PF-2-K/Fru-2, 6-P2ase 4, PFK/FBPase 4, 6PF-2-K/Fru-2, 6-P2ase testis-type isozyme, 6-phosphofructo-2-kinase, Fructose-2, 6-bisphosphatase, PFKFB4

Target/Specificity

This PFKFB4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 266-296 amino acids from the Central region of human PFKFB4.

Dilution

WB~~1:1000 IHC-P~~1:250

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

PFKFB4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PFKFB4 Antibody (Center) - Protein Information



Name PFKFB4

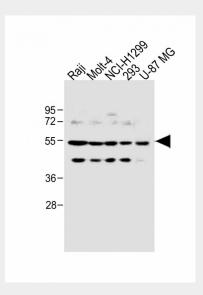
Function Synthesis and degradation of fructose 2,6-bisphosphate.

PFKFB4 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

PFKFB4 Antibody (Center) - Images

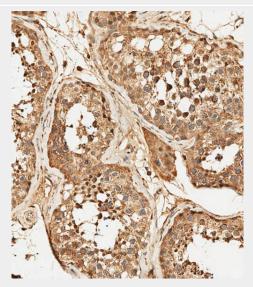


All lanes : Anti-PFKFB4 Antibody (Center) at 1:1000 dilution Lane 1: Raji, whole cell lysate Lane 2: Molt-4 whole cell lysate Lane 3: NCI-H1299 whole cell lysate Lane 4: 293 whole cell lysate Lane 5: U-87 MG whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 54 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





AP8154c staining PFKFB4 in human skeletal muscle tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Samples were incubated with primary antibody (1/100) for 1 hours at room temperature. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



AP8154c staining PFKFB4 in human testis tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Samples were incubated with primary antibody (1/250) for 1 hours at room temperature. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

PFKFB4 Antibody (Center) - 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).

PFKFB4 Antibody (Center) - References

Sakai, A., et al., J. Biochem. 119(3):506-511 (1996). Manzano, A., et al., Gene 229 (1-2), 83-89 (1999).

PFKFB4 Antibody (Center) - Citations

- 6-Phosphofructo-2-kinase/fructose-2,6-biphosphatase 4 is essential for p53-null cancer cells.
- <u>Sertoli-secreted FGF-2 induces PFKFB4 isozyme expression in mouse spermatogenic cells by</u> activation of the MEK/ERK/CREB pathway.
- <u>Functional metabolic screen identifies 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase</u> 4 as an important regulator of prostate cancer cell survival.
- <u>Nuclear targeting of 6-phosphofructo-2-kinase (PFKFB3) increases proliferation via cyclin-dependent kinases.</u>
- Ras inhibition in glioblastoma down-regulates hypoxia-inducible factor-lalpha, causing glycolysis shutdown and cell death.