

Anti-PFKL Antibody

Catalog # AP51425

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P17858
Reactivity	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	85018

Additional Information

Gene ID	5211
Other Names	6-phosphofructokinase, liver type; Phosphofructo-1-kinase isozyme B; PFK-B; Phosphofructokinase 1; Phosphohexokinase
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human PFKL. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

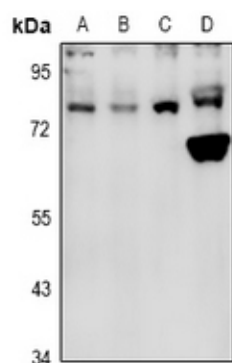
Protein Information

Name	PFKL (HGNC:8876)
Function	Catalyzes the phosphorylation of D-fructose 6-phosphate to fructose 1,6-bisphosphate by ATP, the first committing step of glycolysis (PubMed: 22923583). Negatively regulates the phagocyte oxidative burst in response to bacterial infection by controlling cellular NADPH biosynthesis and NADPH oxidase-derived reactive oxygen species. Upon macrophage activation, drives the metabolic switch toward glycolysis, thus preventing glucose turnover that produces NADPH via pentose phosphate pathway (By similarity).
Cellular Location	Cytoplasm {ECO:0000255 HAMAP-Rule:MF_03184}.

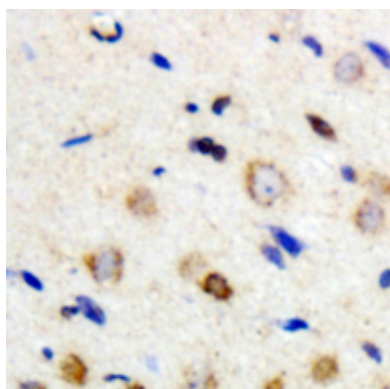
References

Levanon D.,et al.DNA 8:733-743(1989).
 Elson A.,et al.Genomics 7:47-56(1990).
 Hattori M.,et al.Nature 405:311-319(2000).
 Gevaert K.,et al.Nat. Biotechnol. 21:566-569(2003).
 Bienvenut W.V.,et al.Submitted (JUL-2009) to UniProtKB.

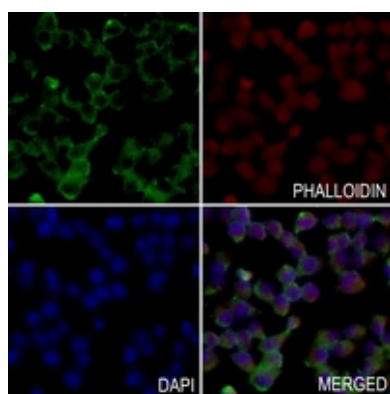
Images



Western blot analysis of PFKL expression in SGC7901 (A), HepG2 (B), HEK293T (C), AML12 (D) whole cell lysates. (Predicted band size: 85 kD; Observed band size: 80 kD)



Immunohistochemical analysis of PFKL staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of PFKL staining in A2780 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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