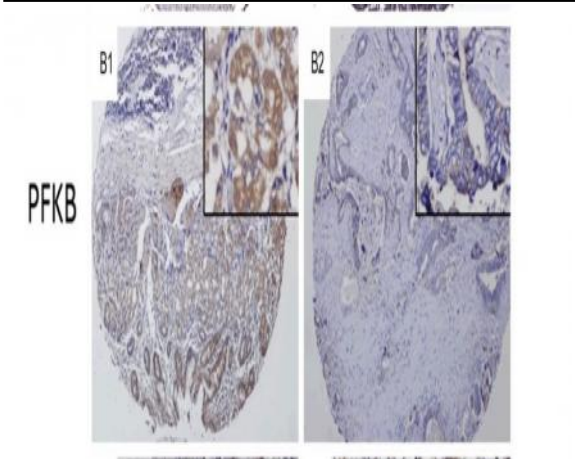
Best Tools for immunology Research

PFK-B Polyclonal Antibody

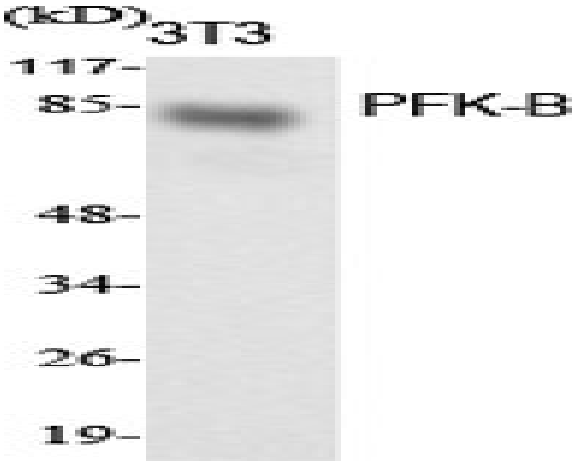
Catalog No :	YT3685
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	PFK-B
Fields :	>>Glycolysis / Gluconeogenesis;>>Pentose phosphate pathway;>>Fructose and mannose metabolism;>>Galactose metabolism;>>Metabolic pathways;>>Carbon metabolism;>>Biosynthesis of amino acids;>>RNA degradation;>>HIF-1 signaling pathway;>>AMPK signaling pathway;>>Thyroid hormone signaling pathway;>>Glucagon signaling pathway;>>Central carbon metabolism in cancer
Gene Name :	PFKL
Protein Name :	6-phosphofructokinase liver type
Human Gene Id :	5211
Human Swiss Prot No :	P17858
Mouse Gene Id :	18641
Mouse Swiss Prot No :	P12382
Rat Gene Id :	25741
Rat Swiss Prot No :	P30835
Immunogen :	The antiserum was produced against synthesized peptide derived from human K6PL. AA range:691-740
Specificity :	PFK-B Polyclonal Antibody detects endogenous levels of PFK-B protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG

Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	85kD
Cell Pathway :	Glycolysis / Gluconeogenesis;Pentose phosphate pathway;Fructose and mannose metabolism;Galactose metabolism;
Background :	This gene encodes the liver (L) subunit of an enzyme that catalyzes the conversion of D-fructose 6-phosphate to D-fructose 1,6-bisphosphate, which is a key step in glucose metabolism (glycolysis). This enzyme is a tetramer that may be composed of different subunits encoded by distinct genes in different tissues. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2014],
Function :	catalytic activity:ATP + D-fructose 6-phosphate = ADP + D-fructose 1,6-bisphosphate.,cofactor:Magnesium.,enzyme regulation:Allosteric enzyme activated by ADP, AMP, or fructose bisphosphate and inhibited by ATP or citrate.,miscellaneous:In human PFK exists as a system of 3 types of subunits, PFKM (muscle), PFKL (liver) and PFKP (platelet) isoenzymes.,pathway:Carbohydrate degradation; glycolysis; D-glyceraldehyde 3-phosphate and glycerone phosphate from D-glucose: step 3/4.,similarity:Belongs to the phosphofructokinase family. Two domains subfamily.,subunit:Tetramer. Muscle is M4, liver is L4, and red cell is M3L, M2L2, or ML3.,
Subcellular Location :	Cytoplasm .
Expression :	Brain,Cervix,Colon,Human amygdala,Human retina,Kidney,Liver,Lung,Muscle,Pla

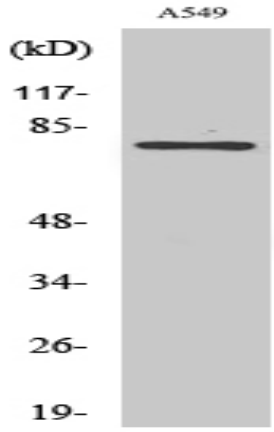
Products Images



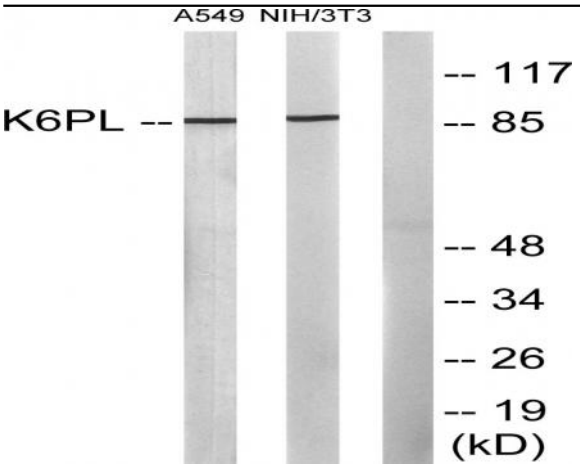
Gao, Yunshu, et al. "Overexpression of metabolic markers HK1 and PKM2 contributes to lymphatic metastasis and adverse prognosis in Chinese gastric cancer." International journal of clinical and experimental pathology 8.8 (2015): 9264.



Western Blot analysis of various cells using PFK-B Polyclonal Antibody diluted at 1:1000



Western Blot analysis of NIH-3T3 cells using PFK-B Polyclonal Antibody diluted at 1:1000



Western blot analysis of lysates from A549 and NIH/3T3 cells, using K6PL Antibody. The lane on the right is blocked with the synthesized peptide.