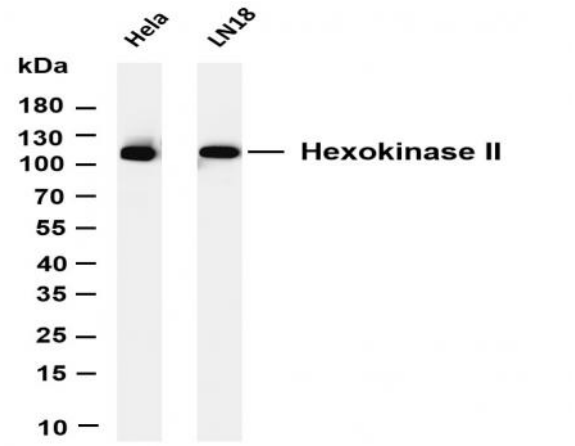
Best Tools for immunology Research

Hexokinase II (PT0189R) PT® Rabbit mAb

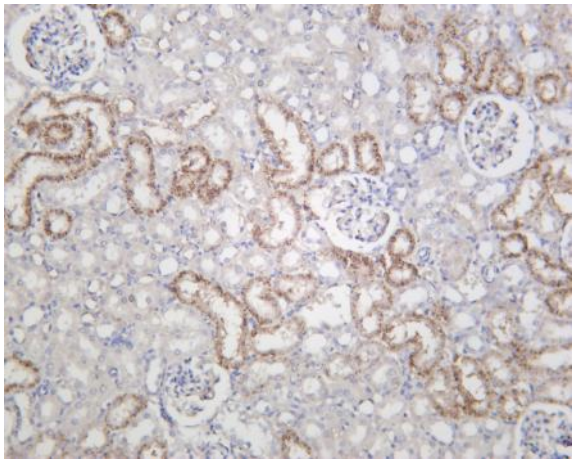
Catalog No :	YM8118
Reactivity :	Human; Mouse; Rat;
Applications :	WB;IHC;IF;IP;ELISA
Target :	HXK II
Fields :	>>Glycolysis / Gluconeogenesis;>>Fructose and mannose metabolism;>>Galactose metabolism;>>Starch and sucrose metabolism;>>Amino sugar and nucleotide sugar metabolism;>>Neomycin, kanamycin and gentamicin biosynthesis;>>Metabolic pathways;>>Carbon metabolism;>>Biosynthesis of nucleotide sugars;>>HIF-1 signaling pathway;>>Insulin signaling pathway;>>Type II diabetes mellitus;>>Carbohydrate digestion and absorption;>>Shigellosis;>>Central carbon metabolism in cancer
Gene Name :	HK2
Protein Name :	Hexokinase-2
Human Gene Id :	3099
Human Swiss Prot No :	P52789
Mouse Gene Id :	15277
Mouse Swiss Prot No :	O08528
Rat Gene Id :	25059
Rat Swiss Prot No :	P27881
Specificity :	endogenous
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Monoclonal, rabbit, IgG, Kappa

Dilution :	IHC 1:200-400,WB 1:1000-5000,IF 1:200-1000,ELISA 1:5000-20000,IP 1:50-200
Purification :	Protein A
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	87kD
Observed Band :	100kD
Cell Pathway :	Glycolysis / Gluconeogenesis;Fructose and mannose metabolism;Galactose metabolism;Starch and sucrose metabolism;Amino sugar and nucleotide sugar metabolism;Insulin_Receptor;Type II diabetes mellitus;
Background :	Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most glucose metabolism pathways. This gene encodes hexokinase 2, the predominant form found in skeletal muscle. It localizes to the outer membrane of mitochondria. Expression of this gene is insulin-responsive, and studies in rat suggest that it is involved in the increased rate of glycolysis seen in rapidly growing cancer cells. [provided by RefSeq, Apr 2009],
Function :	catalytic activity:ATP + D-hexose = ADP + D-hexose 6-phosphate.,domain:The N- and C-terminal halves of this hexokinase show extensive sequence similarity to each other. The catalytic activity is associated with the C-terminus while regulatory function is associated with the N-terminus.,enzyme regulation:Hexokinase is an allosteric enzyme inhibited by its product Glc-6-P.,miscellaneous:In vertebrates there are four major glucose-phosphorylating isoenzymes, designated hexokinase I, II, III and IV (glucokinase).,online information:Hexokinase entry,pathway:Carbohydrate metabolism; hexose metabolism.,polymorphism:Although found in NIDDM patients, genetic variations of HK2 do not contribute to the disease.,similarity:Belongs to the hexokinase family.,subcellular location:Its hydrophobic N-terminal sequence may be involved in membrane binding.,subunit:Monomer.,tissue specificity:Predominant hex
Subcellular Location :	Cytoplasm
Expression :	Predominant hexokinase isozyme expressed in insulin-responsive tissues such as skeletal muscle.

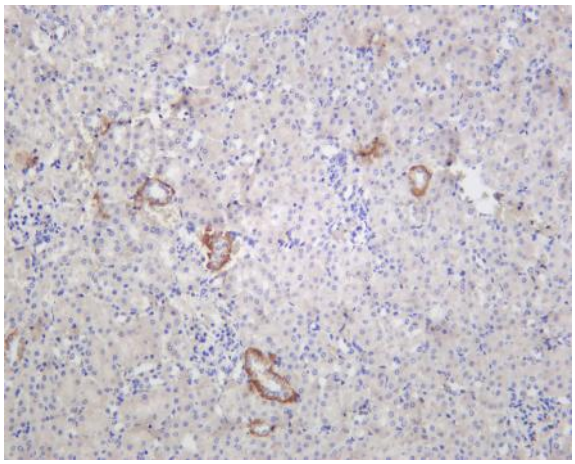
Products Images



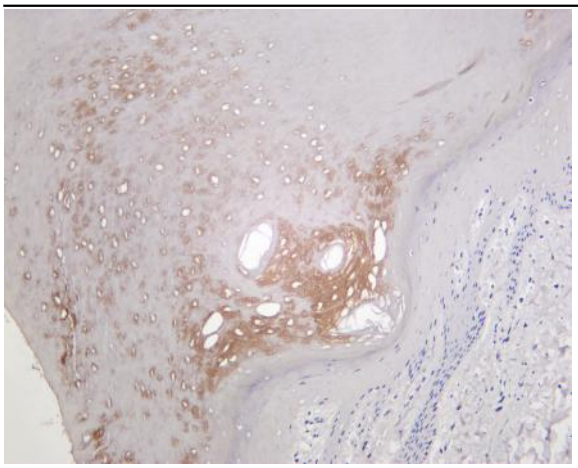
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Hexokinase II (PT0189R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: LN18 Predicted band size: 87kDa Observed band size: 100kDa



Rat kidney was stained with Anti-Hexokinase II (PT0189R) rabbit antibody



Mouse kidney was stained with Anti-Hexokinase II (PT0189R) rabbit antibody



Human skin was stained with Anti-Hexokinase II (PT0189R) rabbit antibody