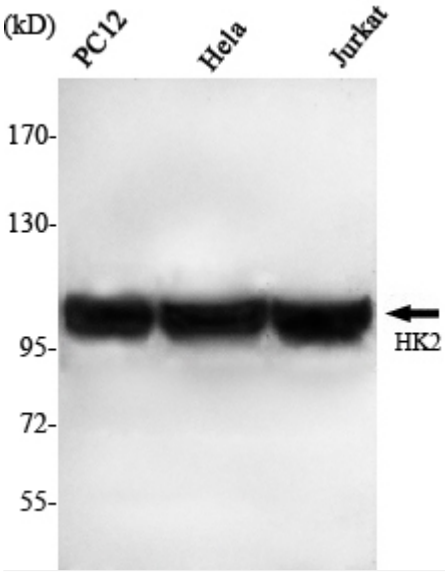
HXK II Monoclonal Antibody

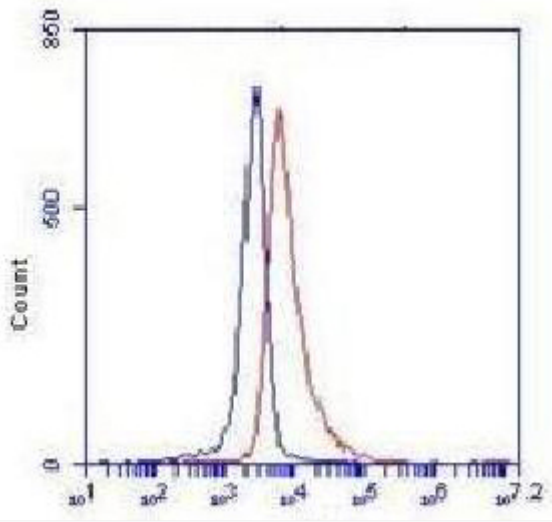
Catalog No	YP-Ab-14199
Isotype	IgG
Reactivity	Human;Mouse;Rat;Pig
Applications	WB
Gene Name	HK2
Protein Name	Hexokinase-2
Immunogen	Purified recombinant human HXK II (N-terminus) protein fragments expressed in E.coli.
Specificity	HXK II Monoclonal Antibody detects endogenous levels of HXK II protein.
Formulation	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/1000 - 1/2000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	HK2; Hexokinase-2; Hexokinase type II; HK II; Muscle form hexokinase
Observed Band	
Cell Pathway	Mitochondrion outer membrane ; Peripheral membrane protein . Cytoplasm, cytosol . The mitochondrial-binding peptide (MBP) region promotes association with the mitochondrial outer membrane (PubMed:29298880). The interaction with the mitochondrial outer membrane via the mitochondrial-binding peptide (MBP) region promotes higher stability of the protein (PubMed:29298880). Release from the mitochondrial outer membrane into the cytosol induces permeability transition pore (PTP) opening and apoptosis (PubMed:18350175). .
Tissue Specificity	Predominant hexokinase isozyme expressed in insulin-responsive tissues such as skeletal muscle.
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
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis using HXK II Monoclonal Antibody against PC12, HeLa, Jurkat cell lysate.



Flow cytometric analysis of K562 cells stained with HXK II Monoclonal Antibody (red), followed by FITC-conjugated goat anti-mouse IgG. Blue line histogram represents the isotype control, normal mouse IgG.