



Hexokinase II mouse mAb

Catalog No	YP-Ab-14220
Isotype	IgG
Reactivity	Rat;Mouse;Monkey
Applications	WB
Gene Name	hk2
Immunogen	Recombinant human Hexokinase II protein.
Specificity	This antibody detects endogenous levels of Hexokinase II and does not cross-react with related proteins.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb 1:500
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	HK2;EC:2.7.1.1;Hexokinase type II;hexokinase2;Hexokinase-2;HXK II;DKFZp686M1669;Hexokinase 2;Hexokinase 2 muscle;HK 2;HK II;HKII;HxK 2;HxK2;HXK2_HUMAN;Muscle form hexokinase.
Observed Band	102kD
Calculated Molecular Weight	102kD
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],

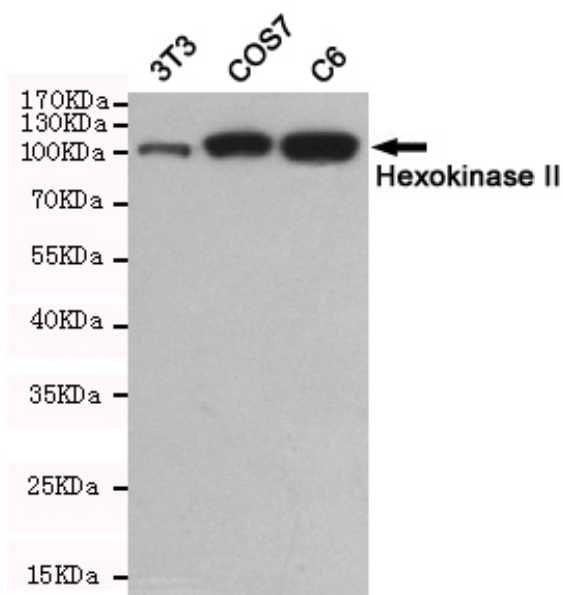
matters needing attention

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 detection of Hexokinase II in 3T3, COS7 and C6 cell lysates using Hexokinase II mouse mAb(dilution 1:500). Predicted band size:102kDa. Observed band size:102kDa.