HXK I Mouse mAb

CatalogNo: YM0349

Key Features

Host Species
- Mouse

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF,FC,ELISA

MW
- 102kD (Calculated)

Recommended Dilution Ratios

WB 1:500-1:2000
IHC 1:200-1:1000
IF 1:200-1:1000
Flow Cyt 1:200-1:400
ELISA 1:10000
Not yet tested in other applications.

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality	Monoclonal

Immunogen Information

Immunogen	Purified recombinant fragment of human HXK I expressed in E. Coli.
Specificity	HXK I Monoclonal Antibody detects endogenous levels of HXK I protein.

Target Information

Gene name HK1

Protein Name Hexokinase-1

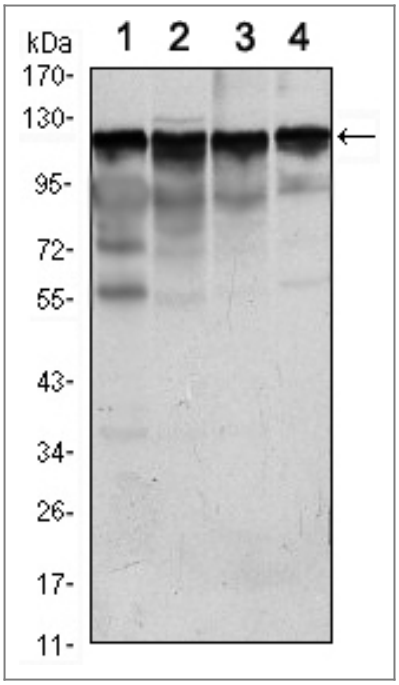
Organism	Gene ID	UniProt ID
Human	3098;	P19367;
Mouse		P17710;
Rat	25058;	P05708;

Cellular Localization Mitochondrion outer membrane ; Peripheral membrane protein . Cytoplasm, cytosol . The mitochondrial-binding peptide (MBP) region promotes association with the mitochondrial outer membrane (Probable). Dissociates from the mitochondrial outer membrane following inhibition by N-acetyl-D-glucosamine, leading to relocation to the cytosol (PubMed:27374331). .

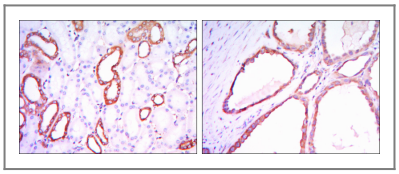
Tissue specificity Isoform 2: Erythrocyte specific (Ref.6). Isoform 3: Testis-specific (PubMed:10978502). Isoform 4: Testis-specific (PubMed:10978502).

Function Catalytic activity:ATP + D-hexose = ADP + D-hexose 6-phosphate.,Disease:Defects in HK1 are the cause of hexokinase deficiency [MIM:235700]. Hexokinase deficiency is a rare autosomal recessive disease with nonspherocytic hemolytic anemia as the predominant clinical feature.,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.,similarity:Belongs to the hexokinase family.,subcellular location:Its hydrophobic N-terminal sequence may be involved in membrane binding.,subunit:Monomer.,tissue specificity:Isoform 2 is erythrocyte specific; isoform 3 and isoform 4 are testis-specific.,

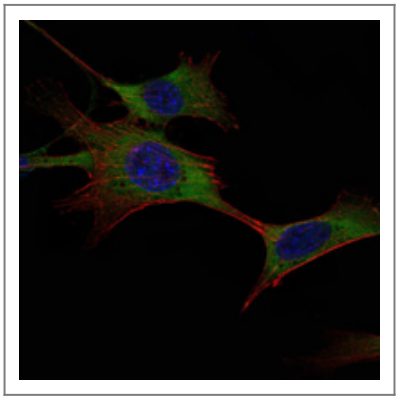
Validation Data



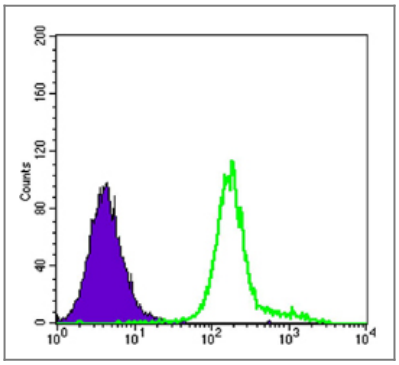
Western Blot analysis using HXK I Monoclonal Antibody against Jurkat (1), HeLa (2), HepG2 (3) and NIH/3T3 (4) cell lysate.



Immunohistochemistry analysis of paraffin-embedded kidney tissues with DAB staining using HXK I Monoclonal Antibody.



Immunofluorescence analysis of NIH/3T3 cells using HXK I Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of K562 cells using HXK I Monoclonal Antibody (green) and negative control (purple).

Contact information

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Please scan the QR code to access additional product information:
HXK I Mouse mAb