

Product Name: HK2 Mouse Monoclonal Antibody**Catalog #: AMM80881**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ELISA,FC
Reactivity	Human,Mouse,Rat,Rabbit
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:500,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	102kDa

Antigen Information

Gene Name	HK2
Alternative Names	HKII; HXK2; DKFZp686M1669; HK2
Gene ID	3099.0
SwissProt ID	P52789
Immunogen	Purified recombinant fragment of human HK2 expressed in E. Coli.

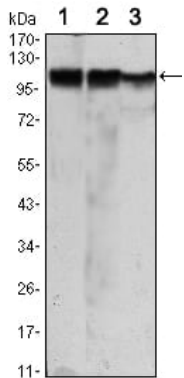
Background

The hexokinases utilize Mg-ATP as a phosphoryl donor to catalyze the first step of intracellular glucose metabolism, the conversion of glucose to glucose- 6-phosphate. Four hexokinase isoenzymes have been identified, including hexokinase I (HXK I), hexokinase II (HXK II), hexokinase III (HXK III) and hexokinase IV (HXK IV, also designated glucokinase or GCK). Hexokinases I-

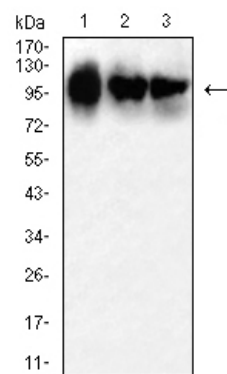
III each contain an N-terminal cluster of hydrophobic amino acids. Glucokinase lacks the N-terminal hydrophobic cluster. The hydrophobic cluster is thought to be necessary for membrane binding. This is substantiated by the finding that glucokinase has lower affinity for glucose than do the other hexokinases. Hexokinase 2 is the predominant hexokinase isozyme expressed in insulin-responsive tissues such as skeletal muscle. 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.

Research Area

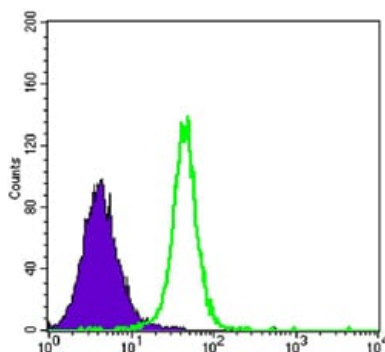
Image Data



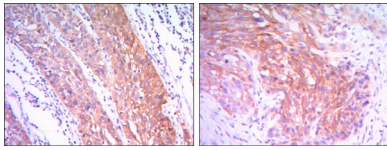
Western blot analysis using HK2 mouse mAb against Jurkat (1), Hela (2) and HEK293 (3) cell lysate.



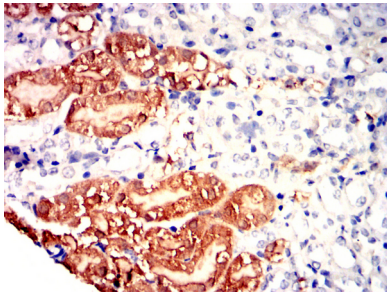
Western blot analysis using HK2 mouse mAb against C2C12(1)HEK293 (2) Jurkat(3) cell lysate.



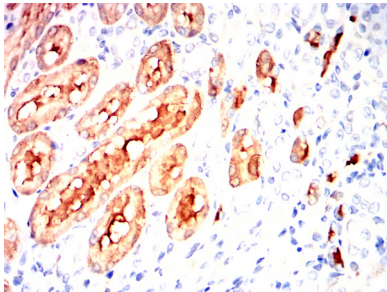
Flow cytometric analysis of K562 cells using HK2 mouse mAb (green) and negative control (purple).



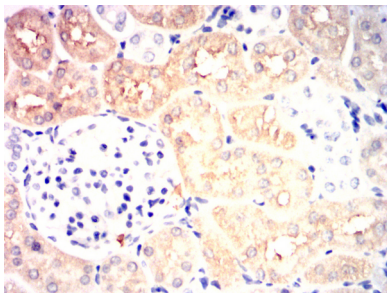
Immunohistochemical analysis of paraffin-embedded human esophagus cancer tissues (left) and human lung cancer (right) using HK2 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded Mouse kidney using HK2 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded Rat kidney using HK2 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded Rabbit kidney using HK2 mouse mAb with DAB staining.