

Product datasheet for **AM06493SU-N**

Hexokinase 1 (HK1) Mouse Monoclonal Antibody [Clone ID: 7A7]

Product data:

Product Type:	Primary Antibodies
Clone Name:	7A7
Applications:	ELISA, IF, IHC, WB
Recommended Dilution:	Western Blot: 1/500 - 1/2000. Immunohistochemistry on paraffin sections 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000.
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of human HK1 expressed in E. Coli.
Specificity:	This antibody reacts to HK1.
Formulation:	State: Ascites State: Ascitic fluid containing 0.03% sodium azide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	102 kDa
Gene Name:	hexokinase 1
Database Link:	Entrez Gene 3098 Human P19367

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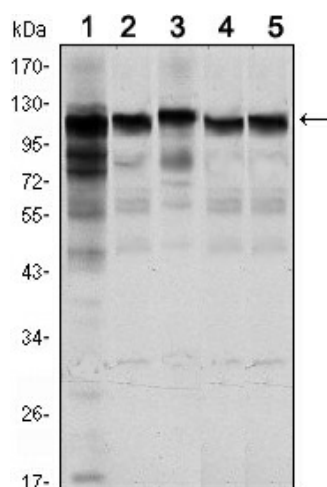
Background:

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. HK I has been shown to be expressed in brain, kidney and heart tissues as well as in hepatoma cell lines.

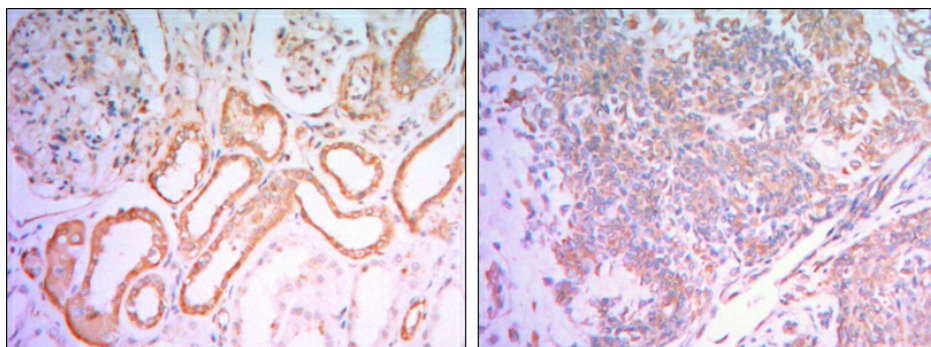
Synonyms:

HK1, Hexokinase type I, Brain form hexokinase

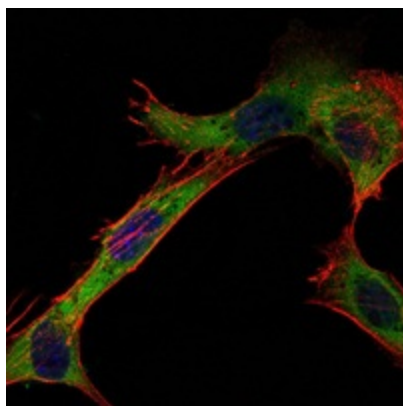
Product images:



Western blot analysis using HK1 mouse mAb against Jurkat (1), Hela (2), HepG2 (3), MCF-7 (4) and PC-12 (5) cell lysate.



Immunohistochemical analysis of paraffin-embedded human salivary gland tissues (left) and kidney tissues (right) using HK1 mouse mAb with DAB staining.



Immunofluorescence analysis of NIH/3T3 cells using HK1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.