

Rabbit HK1 Polyclonal Antibody | anti-HK1 antibody

HK1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA325980	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

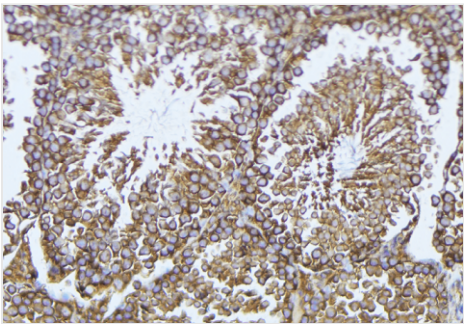
PRODUCT SYNONYMS

HK1; Polyclonal Antibody; HK1 Antibody; Brain form hexokinase; Hexokinase 1; Hexokinase type I; HK I; HK1 ta; HK1 tb; HK1 tc; HKI; HXK1; anti-HK1 antibody

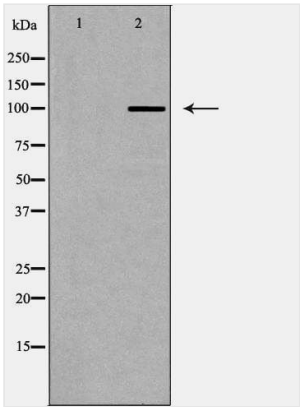
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	HK1 antibody detects endogenous levels of total HK1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	917
Applicable Applications for anti-HK1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human HK1
Subcellular Location	Mitochondrion Outer Membrane. Its hydrophobic N-terminal sequence may be involved in membrane binding.
Tissue Specificity	Isoform 2 is erythrocyte specific. Isoform 3 and isoform 4 are testis-specific.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

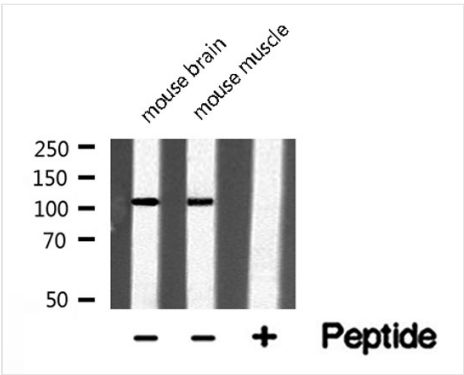
IMAGES



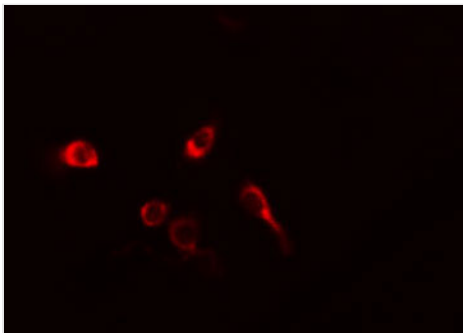
IHC (Immunohistochemistry)
AAA325980 at 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of A375 lysate using HK1 antibody. The lane on the left is treated with the antigen-specific peptide.



WB (Western Blot)
Western blot analysis of extracts of various tissue sample, using HK1 Antibody.



IF (Immunofluorescence)
AAA325980 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-HK1 antibody	Description: Hexokinase catalyzes the conversion of glucose to glucose-6-phosphate, the first step in glycolysis. Four distinct mammalian hexokinase isoforms, designated as hexokinase I, II, III, and IV (glucokinase), have been identified. Hexokinases I, II, and III are associated with the outer mitochondrial membrane and are critical for maintaining an elevated rate of aerobic glycolysis in cancer cells (Warburg Effect) (1) in order to compensate for the increased energy demands associated with rapid cell growth and proliferation (2, 3). Function: In vertebrates there are four major glucose-phosphorylating isoenzymes, designated hexokinase I, II, III and IV (glucokinase). Subunit Structure: Monomer. Interacts with RABL2/RABL2A; binds preferentially to GTP-bound RABL2 (By similarity). Interacts with VDAC1. The HK1-VDAC1 complex interacts with ATF2. Interacts (via N-terminal spermatogenic cell-specific region) with PFKM (via C-terminus) (By similarity). Similarity: 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. Each domain can bind a single glucose and Gluc-6-P molecule. Belongs to the hexokinase family.
--	--

NCBI AND UNIPROT INFORMATION

NCBI GI #	188497754
NCBI GeneID	3098
NCBI Accession #	NP_000179.2
NCBI GenBank Nucleotide #	NM_000188.2

UniProt Accession #	P19367 ; O43443 ; O43444 ; O75574 ; Q5VTC3 ; Q96HC8 ; Q9NNZ4 ; Q9NNZ5 ; E9PCK0
Molecular Weight	Observed: 102 kDa Predicted: 103 kDa
NCBI Official Full Name	hexokinase-1 isoform HKI
NCBI Official Synonym Full Names	hexokinase 1
NCBI Official Symbol	HK1
NCBI Official Synonym Symbols	HK; HKD; HKI; HXK1; RP79; HMSNR; HK1-ta; HK1-tb; HK1-tc; hexokinase
NCBI Protein Information	hexokinase-1
UniProt Protein Name	Hexokinase-1
UniProt Gene Name	HK1
UniProt Synonym Gene Names	HK I

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/hk1-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/325980>