

Product Name: KD-Validated Hexokinase 1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb00204

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 102.5kDa

Antigen Information

Gene Name	HK1
Alternative Names	Brain Form Hexokinase; Hexokinase Type I; Hexokinase-1; Hexokinase-A; EC 2.7.1.1; Neuropathy, Hereditary Motor And Sensory, Russe Type; Glycolytic Enzyme; Hexokinase IR; Hexokinase; EC 2.7.1; NEDVIBA; HK1-Ta; HK1-Tb; HK1-Tc; HMSNR; HXK1; NMSR; RP79; HK I; HKD; HKI; HK
Gene ID	3098.0
SwissProt ID	P19367
Immunogen	A synthesized peptide derived from human Hexokinase 1

Background

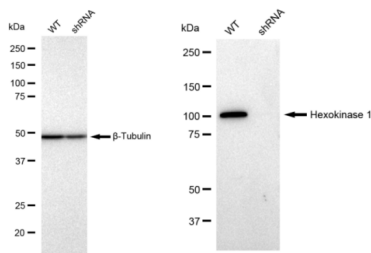
Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most glucose metabolism pathways. This

gene encodes a ubiquitous form of hexokinase which localizes to the outer membrane of mitochondria. Mutations in this gene have been associated with hemolytic anemia due to hexokinase deficiency. Alternative splicing of this gene results in several transcript variants which encode different isoforms, some of which are tissue-specific. [provided by RefSeq, Apr 2016]

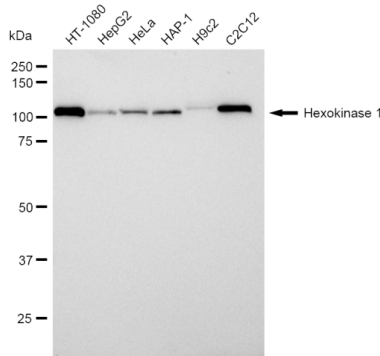
Research Area

Cardiovascular,Signal Transduction,Cell Biology,Cancer,Cell Biology

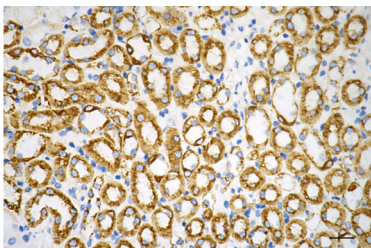
Image Data



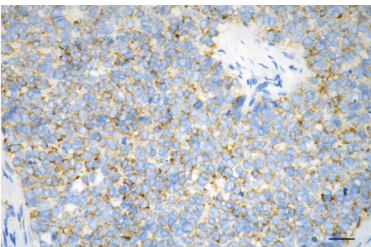
Western blotting analysis using Hexokinase 1 antibody (KVA00204). Hexokinase 1 expression in wild type (WT) and Hexokinase 1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with Hexokinase 1 antibody (KVA00204, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody (APS0635, 1:10,000) respectively.



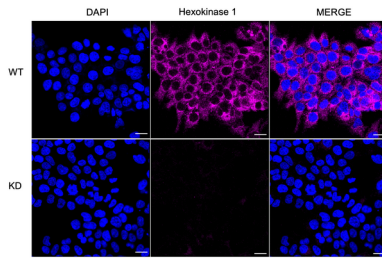
Western blotting analysis using Hexokinase 1 antibody (KVA00204). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Hexokinase 1 antibody (KVA00204, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody (APS0635, 1:10,000) respectively.



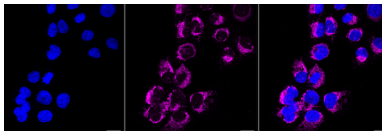
Immunohistochemistry was performed on paraffin-embedded mouse kidney using hexokinase 1 antibody (KVA00204, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



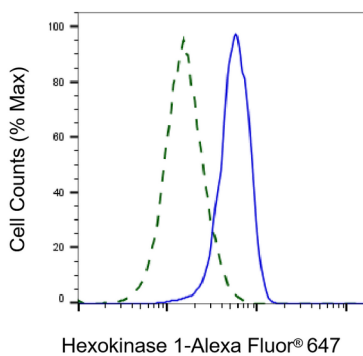
Immunohistochemistry was performed on paraffin-embedded human breast carcinoma using hexokinase 1 antibody (KVA00204, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



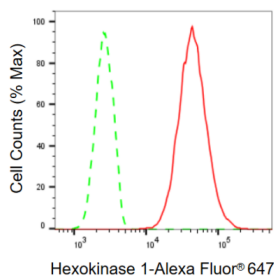
Immunocytochemical staining of HeLa cells using hexokinase 1 antibody (KVA00204, 1:1,000), Top panel: wild-type (WT); Bottom panel: Hexokinase 1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Hexokinase 1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of HT-1080 cells with Hexokinase 1 antibody (KVA00204, 1:1,000). Nuclei were stained blue with DAPI; Hexokinase 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Validation of Hexokinase 1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Hexokinase 1 antibody (KVA00204, 1:2,000) and analyzed using CytoFLEX.



Flow cytometric analysis of Hexokinase 1 expression in HT-1080 cells using Hexokinase 1 antibody (KVA00204,1:2,000). Green, isotype control; red, Hexokinase 1