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HK3 (Hexokinase III) Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8139b

Specification

HK3 (Hexokinase III) Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P52790
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**760-789**

HK3 (Hexokinase III) Antibody (C-term) - Additional Information

Gene ID 3101

Other Names
Hexokinase-3, Hexokinase type III, HK III, HK3

Target/Specificity
This HK3 (Hexokinase III) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 760-789 amino acids from the C-terminal region of human HK3 (Hexokinase III).

Dilution
WB~~1:1000
IHC-P~~1:50~100

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
HK3 (Hexokinase III) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HK3 (Hexokinase III) Antibody (C-term) - Protein Information

Name HK3 (HGNC:4925)

Function Catalyzes the phosphorylation of hexose, such as D-glucose and D-fructose, to hexose 6-phosphate (D-glucose 6-phosphate and D- fructose 6-phosphate, respectively)

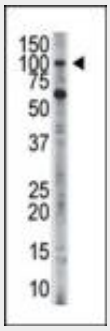
(PubMed:8717435). Mediates the initial step of glycolysis by catalyzing phosphorylation of D-glucose to D-glucose 6-phosphate (PubMed:8717435).

HK3 (Hexokinase III) Antibody (C-term) - Protocols

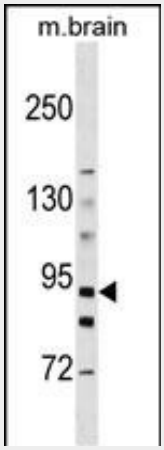
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HK3 (Hexokinase III) Antibody (C-term) - Images



The anti-HK3 Pab (Cat. #AP8139b) is used in Western blot to detect HK3 in HL-60 cell lysate.



HK3 Antibody (R775) (Cat. #AP8139b) western blot analysis in mouse brain tissue lysates (35ug/lane).This demonstrates the HK3 antibody detected the HK3 protein (arrow).

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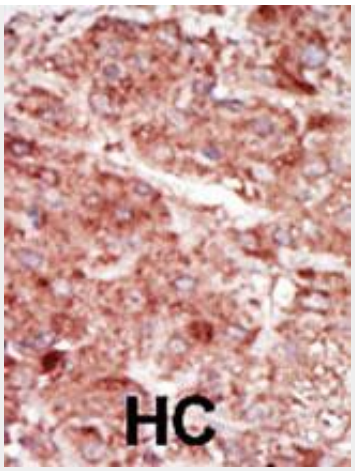

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

HK3 (Hexokinase III) Antibody (C-term) - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The AGC kinase group consists of 63 kinases including the cyclic nucleotide-regulated protein kinase (PKA & PKG) family, the diacylglycerol-activated/phospholipid-dependent protein kinase C (PKC) family, the related to PKA and PKC (RAC/Akt) protein kinase family, the kinases that phosphorylate G protein-coupled receptors family (ARK), and the kinases that phosphorylate ribosomal protein S6 family (RSK).

HK3 (Hexokinase III) Antibody (C-term) - References

Furuta, H., et al., Genomics 36(1):206-209 (1996).
Palma, F., et al., Mol. Cell. Biochem. 155(1):23-29 (1996).
Colosimo, A., et al., Cytogenet. Cell Genet. 74(3):187-188 (1996).

HK3 (Hexokinase III) Antibody (C-term) - Citations

- Analyses of resected human brain metastases of breast cancer reveal the association between up-regulation of hexokinase 2 and poor prognosis.