

HK3 (Hexokinase III) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8139d

Product Information

Application Primary Accession	WB, E <u>P52790</u>
Other Accession	<u>NP_002106</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB5335
Calculated MW	99025
Antigen Region	1-30

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 1-30 amino acids from the N-terminal region of human HK3 (Hexokinase III).
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HK3 (<u>HGNC:4925</u>)
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: <u>8717435</u>). Mediates the initial step of glycolysis by catalyzing phosphorylation of D-glucose to D-glucose 6-phosphate

Background

Hexokinases phosphorylate glucose to produce glucose-6-phosphate, thus committing glucose to the glycolytic pathway. This gene encodes hexokinase 3. Similar to hexokinases 1 and 2, this allosteric enzyme is inhibited by its product glucose-6-phosphate.

References

Sui, D., et al., Arch. Biochem. Biophys. 382(2):262-274 (2000).
Lowes, W., et al., Biochim. Biophys. Acta 1379(1):134-142 (1998).
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).

Images



Western blot analysis of anti-HK3 Pab (Cat. #AP8139d) in Hela cell line lysate (35ug/lane). HK3(arrow) was detected using the purified Pab.

Citations

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.