

Hexokinase 1 Rabbit mAb [zDI3]

Cat NO. :A17005

Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB IHC ICC/IF FC	Human,Mouse,R	P19367	102kDa	Rabbit	IgG	50ul,100ul,200ul
	at					

Applications detail:

ApplicationDilutionWB1:1000-2000IHC1:100ICC/IF1:100The optimal dilutions should be determined by the end user

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

Purification:

Affinity-chromatography

Specificity:

Antibody is produced by immunizing animals with A synthesized peptide derived from human Hexokinase 1

Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

Tissue specificity:

Isoform 2: Erythrocyte specific (Ref.6). Isoform 3: Testis-specific (PubMed:10978502). Isoform 4: Testis-specific (PubMed:10978502).

Subcellular location:

Mitochondrion outer membrane, Peripheral membrane protein. Cytoplasm, cytosol.

Function:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/
Immunofluorescence F: Flow Cytometry

Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse



Catalyzes the phosphorylation of various hexoses, such as D-glucose, D-glucosamine, D-fructose, D-mannose and 2-deoxy-D-glucose, to hexose 6-phosphate (D-glucose 6-phosphate, D-glucosamine 6-phosphate, D-fructose 6-phosphate, D-mannose 6-phosphate and 2-deoxy-D-glucose 6-phosphate, respectively) (PubMed:1637300, PubMed:25316723, PubMed:27374331). Does not phosphorylate N-acetyl-D-glucosamine (PubMed:27374331). Mediates the initial step of glycolysis by catalyzing phosphorylation of D-glucose to D-glucose 6-phosphate (By similarity). Involved in innate immunity and inflammation by acting as a pattern recognition receptor for bacterial peptidoglycan (PubMed:27374331). When released in the cytosol, N-acetyl-D-glucosamine component of bacterial peptidoglycan inhibits the hexokinase activity of HK1 and causes its dissociation from mitochondrial outer membrane, thereby activating the NLRP3 inflammasome (PubMed:27374331)..

Validation Data:

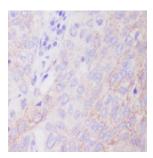
Hexokinase 1 Rabbit mAb [zDI3] Images



Western blot (SDS PAGE) analysis of extracts from (1) MCF-7 cell lysate; (2) 293T cell lysate. Using Hexokinase 1 Rabbit mAb [zDI3]at dilution of 1:1000 incubated at 4° C over night.

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Immunohistochemical analysis of paraffin-embedded human lung carcinoma, . Using Hexokinase 1 Rabbit mAb [zDI3] at dilution of 1:100 incubated at 4 $^{\circ}\mathrm{C}$ over night. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.