

Immunotag™ Hexokinase 1 mouse mAb

Antibody Specification	
Catalog No.	ITM1282
Product Description	Immunotag™ Hexokinase 1 mouse mAb
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Hexokinase 1
Clonality	Monoclonal
Storage/Stability	-20°C/1 year
Application	WB
Recommended Dilution	wb 1:1000
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Mouse
Immunogen	Purified recombinant human Hexokinase 1 protein fragments expressed in E.coli
Specificity	This antibody detects endogenous levels of Hexokinase 1 and does not cross-react with Hexokinase 2 and other proteins.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	hk1
Accession No.	P19367 P17710
Alternate Names	BB404130; Brain form hexokinase; dea; EC 2.7.1.1; Glycolytic enzyme; HEXOKIN; Hexokinase PI; Hexokinase type I; Hexokinase, tumor isozyme; Hexokinase-1; Hexokinase-A; HK I; HK1; HK1 tb; Hk1-s; HK1-ta; HK1-tb; HK1-tc; HKD; HKI; HMSNR; HXK1; HXK1_HUMAN; mHk1-s.

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Description	hexokinase 1(HK1) Homo sapiens 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],
Cell Pathway/ Category	Glycolysis / Gluconeogenesis,Fructose and mannose metabolism,Galactose metabolism,Starch and sucrose metabolism,Amino sugar and nucleotide sugar metabolism,Insulin_Receptor,Type II diabetes mellitus,
Protein Expression	Brain,Embryonic kidney,Placenta,Spleen,Testis,
Subcellular Localization	cell,mitochondrion,mitochondrial outer membrane,cytosol,membrane raft,sperm principal piece,
Protein Function	catalytic activity:ATP + D-hexose = ADP + D-hexose 6-phosphate.,disease:Defects in HK1 are the cause of hexokinase deficiency [MIM:235700]. Hexokinase deficiency is a rare autosomal recessive disease with nonspherocytic hemolytic anemia as the predominant clinical feature.,domain: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.,enzyme regulation:Hexokinase is an allosteric enzyme inhibited by its product Glc-6-P.,miscellaneous:In vertebrates there are four major glucose-phosphorylating isoenzymes, designated hexokinase I, II, III and IV (glucokinase).,online information:Hexokinase entry,pathway:Carbohydrate metabolism; hexose metabolism.,similarity:Belongs to the hexokinase family.,subcellular location:Its hydrophobic N-terminal sequence may be involved in membrane binding.,subunit:Monomer.,tissue specificity:Isoform 2 is erythrocyte specific; isoform 3 and isoform 4 are testis-specific.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.