Hexokinase 2 (HK2) Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	Hexokinase 2 (HK2), Polyclonal Antibody
Full Product Name	PE-Linked Polyclonal Antibody to Hexokinase 2 (HK2)
Product Gene Name	anti-HK2 antibody
Product Synonym Names	HK II; Muscle form hexokinase
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Mouse, Human, Rat
Concentration	>=100ug/ml (lot specific)
Matching Pairs	Unconjugated Antibody: HK2 (MBS2005851) PE Conjugated Antibody: HK2 (MBS2071069)
Matching Pairs	PE Conjugated Antibody: HK2 (MBS2071069) Immunogen: HK2 (MBS2010297)
Molecular Weight	102,380 Da
OMIM	Z46376 mRNA
Supply Chain Verification	Manufactured in a lab with traceable raw materials. Bulk orders can typically be prepared to the customer's specifications, please inquire.
Immunogen	HK2 (Pro605~His868)
Conjugation	PE
Cross Reactivity	Mouse
Unconjugated Antibody	The unconjugated antibody version of this item is also available as catalog #MBS2005851
ISO Certification	Manufactured in an ISO 9001:2015 and ISO 13485:2016 Certified Laboratory.
Applications Tested/Suitable for anti-HK2 antibody	Western Blot (WB), Immunocytochemistry (ICC), Immunohistochemistry (IHC) Formalin/Paraffin, ELISA (ELISA)
Related Product Information for anti-HK2 antibody	MBS2071069 is an antibody targeting HK2. Also known as PE-Linked Polyclonal Antibody to Hexokinase 2 (HK2). Reactive in Mouse, Human, Rat. Host: Rabbit.
Other Notes	Small volumes of anti-HK2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for HK2. It may not necessarily be applicable to this product.

NCBI GI #	39963174
NCBI GeneID	3099
NCBI Accession #	AAH64369.1
UniProt Secondary Accession #	Q8WU87; Q9UN82; D6W5J2

UniProt Related Accession #	P52789
NCBI Official Full Name	Hexokinase 2
NCBI Official Synonym Full Names	hexokinase 2
NCBI Official Symbol	HK2
NCBI Official Synonym Symbols	HKII; HXK2
UniProt Protein Name	Hexokinase-2
UniProt Synonym Protein Names	Hexokinase type II; HK II; Muscle form hexokinase
Protein Family	Probable histidine kinase
UniProt Gene Name	HK2
UniProt Synonym Gene Names	HK II
NCBI Protein Information	hexokinase-2
NCBI Summary for HK2	Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most glucose metabolism pathways. This gene encodes hexokinase 2, the predominant form found in skeletal muscle. It localizes to the outer membrane of mitochondria. Expression of this gene is insulin-responsive, and studies in rat suggest that it is involved in the increased rate of glycolysis seen in rapidly growing cancer cells. [provided by RefSeq, Apr 2009]
UniProt Comments for HK2	HK2: a glycolytic enzyme that catalyzes the reaction ATP + D-hexose = ADP + D-hexose 6-phosphate. The first and rate-limiting step in glycosis, a pathway that produces energy in the form of ATP from glucose. An allosteric enzyme inhibited by its product glucose-6-phosphate (Glc-6-P). The predominant hexokinase isozyme expressed in insulin-responsive tissues such as skeletal muscle. Acts as a ""glucose sensor"" by trapping glucose inside the cell by catalyzing its phosphorylation to produce Glc-6-P. In vertebrates there are four major glucose-phosphorylating isoenzymes, designated hexokinase I, II, III and IV (glucokinase). Genetic variations of HK2 do not appear to contribute to NIDDM. Protein type: Carbohydrate Metabolism - amino sugar and nucleotide sugar; Carbohydrate Metabolism - fructose and mannose; Carbohydrate Metabolism - galactose; Carbohydrate Metabolism - glycolysis and gluconeogenesis; Carbohydrate Metabolism - starch and sucrose; EC 2.7.1.1; Kinase, other; Mitochondrial Chromosomal Location of Human Ortholog: 2p12 Cellular Component: cytosol; membrane; mitochondrial outer membrane Molecular Function: fructokinase activity; glucokinase activity; hexokinase activity; mannokinase activity; protein binding Biological Process: apoptotic mitochondrial changes; cell glucose homeostasis; glucose transport; glycolysis
Research Articles on HK2	**1.** miR-181b directly inhibits the expression level of hexokinase 2 (HK2), a key enzyme that catalyzes the first step of glycolysis, through targeting its 3'-untranslated region.
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