## HK2 polyclonal antibody

Catalog # PAB4004 Size 400 uL

## Applications



## Western Blot (Cell lysate)

The HK2 polyclonal antibody (Cat # PAB4004) is used in Western blot to detect HK2 in A-375 cell lysate.



#### Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Formalin-fixed and paraffin-embedded human skeletal muscle tissue reacted with HK2 polyclonal antibody (Cat # PAB4004), which was peroxidaseconjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of HK2.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human HK2.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein G purification



## **Product Information**

Recommend Usage	ELISA (1:1000) Western Blot (1:100-500) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

## Applications

• Western Blot (Cell lysate)

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Enzyme-linked Immunoabsorbent Assay

## Gene Info — HK2

Entrez GenelD	3099
Protein Accession#	<u>P52789</u>
Gene Name	HK2
Gene Alias	DKFZp686M1669, HKII, HXK2
Gene Description	hexokinase 2
Omim ID	<u>601125</u>
Gene Ontology	<u>Hyperlink</u>



#### **Product Information**

**Gene Summary** 

Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most gluco se metabolism pathways. This gene encodes hexokinase 2, the predominant form found in skelet al muscle. It localizes to the outer membrane of mitochondria. Expression of this gene is insulin-re sponsive, and studies in rat suggest that it is involved in the increased rate of glycolysis seen in ra pidly growing cancer cells. [provided by RefSeq

**Other Designations** 

hexokinase-2, muscle

#### **Publication Reference**

 Human hexokinase II gene: exon-intron organization, mutation screening in NIDDM, and its relationship to muscle hexokinase activity.

Lehto M, Huang X, Davis EM, Le Beau MM, Laurila E, Eriksson KF, Bell Gl, Groop L. Diabetologia 1995 Dec; 38(12):1466.

Amino acid substitutions in hexokinase II among patients with NIDDM.

Laakso M, Malkki M, Deeb SS. Diabetes 1995 Mar; 44(3):330.

• <u>Analysis of the hexokinase II gene in subjects with insulin resistance and NIDDM and detection of a GIn142--</u> >His substitution.

Vidal-Puig A, Printz RL, Stratton IM, Granner DK, Moller DE. Diabetes 1995 Mar; 44(3):340.

#### Pathway

- Amino sugar and nucleotide sugar metabolism
- Biosynthesis of alkaloids derived from histidine and purine
- Biosynthesis of alkaloids derived from ornithine
- Biosynthesis of alkaloids derived from shikimate pathway
- Biosynthesis of alkaloids derived from terpenoid and polyketide
- Biosynthesis of phenylpropanoids
- Biosynthesis of plant hormones
- Biosynthesis of terpenoids and steroids

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## **Product Information**

- Fructose and mannose metabolism
- Galactose metabolism
- <u>Glycolysis / Gluconeogenesis</u>
- Insulin signaling pathway
- Metabolic pathways
- Starch and sucrose metabolism
- <u>Streptomycin biosynthesis</u>
- Type II diabetes mellitus