

**HK2 (Hexokinase II) (Center) Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10116****Specification**

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**HK2 (Hexokinase II) (Center) Antibody - Product Information**

Application	WB, IHC, E
Primary Accession	<a href="#">P52789</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	102380

**HK2 (Hexokinase II) (Center) Antibody - Additional Information****Gene ID** 3099

Positive Control	Western Blot: A375 cell lysate Immunohistochemistry: Human cancer tissue
Application & Usage	The antibody can be used for ELISA (0.25 µg/ml), Western blotting (0.5 - 2.5 µg/ml) and Immunohistochemistry (2.5 - 5.0 µg/ml).

**Other Names**

Hexokinase type II, HK II, Muscle form hexokinase

**Target/Specificity**

HK2 (Hexokinase II)

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µg (0.25 mg/ml) purified rabbit Ig polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions**

### Precautions

HK2 (Hexokinase II) (Center) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## HK2 (Hexokinase II) (Center) Antibody - Protein Information

**Name** HK2 ([HGNC:4923](#))

### 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:<a href="http://www.uniprot.org/citations/23185017" target="\_blank">23185017</a>, PubMed:<a href="http://www.uniprot.org/citations/26985301" target="\_blank">26985301</a>, PubMed:<a href="http://www.uniprot.org/citations/29298880" target="\_blank">29298880</a>). Mediates the initial step of glycolysis by catalyzing phosphorylation of D-glucose to D-glucose 6-phosphate (PubMed:<a href="http://www.uniprot.org/citations/29298880" target="\_blank">29298880</a>). Plays a key role in maintaining the integrity of the outer mitochondrial membrane by preventing the release of apoptogenic molecules from the intermembrane space and subsequent apoptosis (PubMed:<a href="http://www.uniprot.org/citations/18350175" target="\_blank">18350175</a>).

### Cellular Location

Mitochondrion outer membrane; Peripheral membrane protein. Cytoplasm, cytosol Note=The mitochondrial-binding peptide (MBP) region promotes association with the mitochondrial outer membrane (PubMed:29298880) The interaction with the mitochondrial outer membrane via the mitochondrial-binding peptide (MBP) region promotes higher stability of the protein (PubMed:29298880). Release from the mitochondrial outer membrane into the cytosol induces permeability transition pore (PTP) opening and apoptosis (PubMed:18350175).

### Tissue Location

Predominant hexokinase isozyme expressed in insulin-responsive tissues such as skeletal muscle

## HK2 (Hexokinase II) (Center) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## HK2 (Hexokinase II) (Center) Antibody - Images

## HK2 (Hexokinase II) (Center) Antibody - Background

In vertebrates there are four major glucose-phosphorylating isoenzymes, designated hexokinase I, II, III, and IV. Hexokinase is an allosteric enzyme inhibited by its product GLC-6-P. Hexokinase activity is involved in the first step in several metabolic pathways. HK3 is bound to the outer mitochondrial membrane. Its hydrophobic N-terminal sequence may be involved in membrane binding. It is the predominant hexokinase isozyme expressed in insulin-responsive tissues such as skeletal muscle. 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. Although found in NIDDM patients, genetic variations of HK2 do not contribute to the disease.