

## HK2 (Hexokinase II), Rabbit pAb

**CATALOG #:** 3144-100

**AMOUNT:** 100 µg

**LOT #:** \_\_\_\_\_

**HOST (ISOTYPE):** Rabbit (Ig)

**IMMUNOGEN:** KLH conjugated synthetic peptide selected from the N-terminal region of human HK2.

**SPECIES REACTIVITY:** Human, (Mouse)

### FORMULATION:

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.

### STORAGE CONDITIONS:

Maintain refrigerated at 2-8°C for up to 6 months or -20°C for long term storage.

### BACKGROUND DESCRIPTION:

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.

### Background References :

1. Lehto, M., et al., Diabetologia 38(12):1466-1474 (1995).
2. Vidal-Puig, A., et al., Diabetes 44(3):340-346 (1995).
3. Laakso, M., et al., Diabetes 44(3):330-334 (1995).
4. Echwald, S.M., et al., Diabetes 44(3):347-353 (1995).
5. Shinohara, Y., et al., Cancer Lett. 82(1):27-32 (1994).

### OTHER NAMES:

Hexokinase, type II; HK II; Muscle form hexokinase

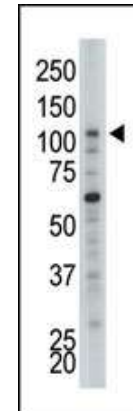
### SPECIFICITY:

The antibody detects a ~ 102 kDa band, corresponding to the expected molecular mass of HK2 on immunoblots.

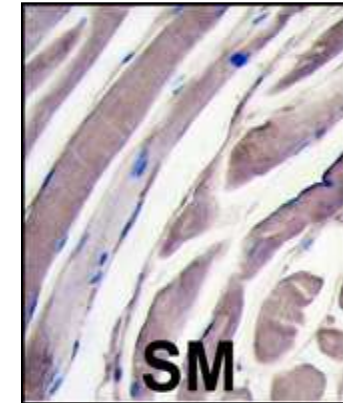
### APPLICATION (suggested concentration):

The antibody can be used for ELISA (0.25 µg/ml), Western blotting (0.5 – 2.5 µg/ml), Immunohistochemistry (2.5 – 5 µg/ml).

### APPLICATION DATA (Calculated MW = 102367Da):



Western blot analysis of anti-HK2 (Cat#3144-100) to detect HK2 in A375 cell lysate.



Formalin-fixed and paraffin-embedded human skeletal muscle tissue reacted with HK2 antibody (Cat#3144-100), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.

### RELATED PRODUCTS:

#### Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

#### Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System