HK2 (Hexokinase II), Rabbit pAb

CATALOG #: 3145-100

AMOUNT: 100 μg

LOT #: _____

HOST(ISOTYPE): Rabbit (Ig)

IMMUNOGEN: KLH conjugated synthetic peptide selected from the center region of human HK2.

SPECIES REACTIVITY: Human

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 bindng. It is the predominant hexokinase isozyme expressed in insuline-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 wiht 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).

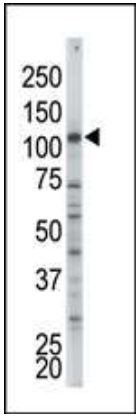
OTHER NAMES:
Hexokinase, type II; HK II; Muscle form hexokinase

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

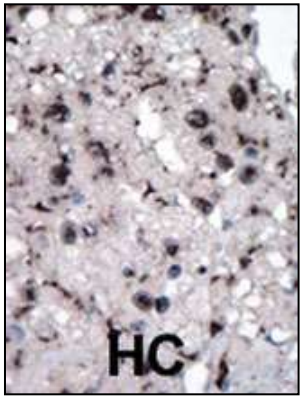
FOR RESEARCH USE ONLY! Not to be used on humans.

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 = 102367 Da):



Western blot analysis of anti-HK2 (Cat#3145-100) to detect HK2 in A375 cell lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. HC = hepatocarcinoma.

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

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