

Store at -20C
#2106

Hexokinase II Antibody

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**Cell Signaling**
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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H Mk	Endogenous	102	Rabbit	#P52789	3099

Product Usage Information**Application**
Western Blotting**Dilution**
1:1000**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Hexokinase II Antibody detects endogenous levels of total hexokinase (isoform II) protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp341 of human hexokinase II protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Hexokinase catalyzes the conversion of glucose to glucose-6-phosphate, the first step in glycolysis. Four distinct mammalian hexokinase isoforms, designated as hexokinase I, II, III, and IV (glucokinase), have been identified. Hexokinases I, II, and III are associated with the outer mitochondrial membrane and are critical for maintaining an elevated rate of aerobic glycolysis in cancer cells (Warburg Effect) (1) in order to compensate for the increased energy demands associated with rapid cell growth and proliferation (2,3).

Background References

1. WARBURG, O. (1956) *Science* 123, 309-14.
2. Semenza, G.L. (2000) *Crit Rev Biochem Mol Biol* 35, 71-103.
3. Smith, T.A. (2000) *Br J Biomed Sci* 57, 170-8.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.**Applications Key****W:** Western Blotting**Cross-Reactivity Key****H:** Human **Mk:** Monkey**Trademarks and Patents**

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