



Orders: 877-616-CELL (2355)
orders@cellsignal.com

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Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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#2106

Hexokinase II Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H Mk	Sensitivity: Endogenous	MW (kDa): 102	Source/Isotype: Rabbit	UniProt ID: #P52789	Entrez-Gene Id: 3099
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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 the sequence of human hexokinase (isoform II). 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	<ol style="list-style-type: none"> 1. WARBURG, O. (1956) <i>Science</i> 123, 309-14. 2. Semenza, G.L. (2000) <i>Crit Rev Biochem Mol Biol</i> 35, 71-103. 3. Smith, T.A. (2000) <i>Br J Biomed Sci</i> 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	
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