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Anti-Hexokinase II Antibody (1E8-H3-F11)

Mouse Monoclonal Antibody
Catalog # ABV12058

Product Information

Application	WB
Primary Accession	P52789
Reactivity	Mouse, Rat, Monkey
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Names	1E8-H3-F11
Calculated MW	102380

Additional Information

Gene ID	3099
Application & Usage	WB: 3T3, COS7 and C6 cell lysates
Other Names	Hexokinase-2, Hexokinase type II, HK II, Muscle form hexokinase, HK2
Target/Specificity	Hexokinase-2
Antibody Form	Liquid
Appearance	Colorless liquid
Formulation	In PBS (pH 7.4) containing with 0.03% Proclin 300 and 50% glycerol
Handling	The antibody solution should be gently mixed before use.
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	Anti-Hexokinase II Antibody (1E8-H3-F11) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

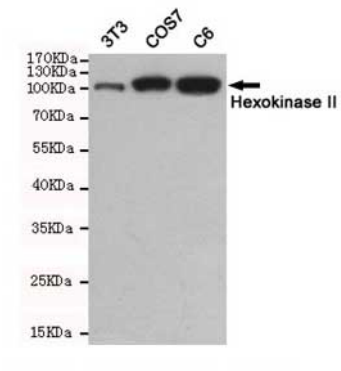
Name	HK2 (HGNC:4923)
Function	Catalyzes the phosphorylation of hexose, such as D-glucose and D-fructose, to hexose 6-phosphate (D-glucose 6-phosphate and D- fructose 6-phosphate, respectively) (PubMed:23185017, PubMed:26985301, PubMed:29298880). Mediates the initial step of glycolysis by catalyzing phosphorylation of D-glucose to D-glucose 6-phosphate (PubMed:29298880). 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:18350175).
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

Background

Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most glucose metabolism pathways. This gene encodes hexokinase 2, the predominant form found in skeletal muscle. It localizes to the outer membrane of mitochondria. Expression of this gene is insulin-responsive, and studies in rat suggest that it is involved in the increased rate of glycolysis seen in rapidly growing cancer cells.

Images



Western blot detection of Hexokinase II in 3T3, COS7 and C6 cell lysates using Hexokinase il mouse mAb

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.