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HK2 (Hexokinase II) Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8606b

Product Information

Application	WB, IHC-P, E
Primary Accession	P52789
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	1798CT748.15.25
Calculated MW	102380

Additional Information

Gene ID	3099
Other Names	Hexokinase-2, 2.7.1.1, Hexokinase type II, HK II, Muscle form hexokinase, HK2
Target/Specificity	This HK2 (Hexokinase II) antibody is generated from a mouse immunized with a recombinant protein between 1-170 amino acids from human HK2 (Hexokinase II).
Dilution	WB~~1:500-1:1000 IHC-P~~1:400 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HK2 (Hexokinase II) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

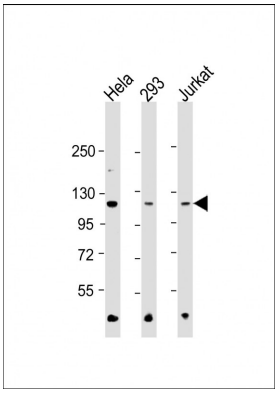
Name	HK2 (HGNC:4923)
Function	Catalyzes the phosphorylation of hexose, such as D-glucose and D-fructose, to hexose 6-phosphate (D-glucose 6-phosphate and D- fructose 6-phosphate, respectively) (PubMed:23185017, PubMed:26985301, PubMed:29298880). Mediates the initial step of glycolysis by catalyzing phosphorylation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

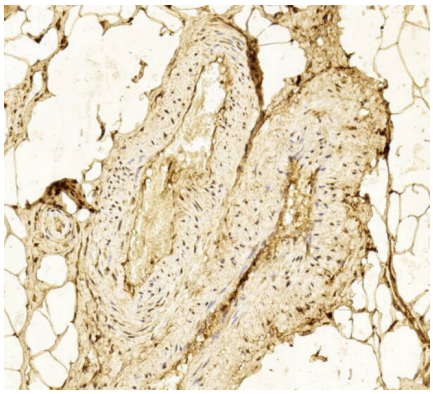
References

Deeb S.S.,et al.Biochem. Biophys. Res. Commun. 197:68-74(1993).
Lehto M.,et al.Diabetologia 38:1466-1474(1995).
Malkki M.,et al.Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases.
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Shinohara Y.,et al.Cancer Lett. 82:27-32(1994).

Images



All lanes : Anti-HK2 (Hexokinase II) Antibody at 1:500-1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: 293 whole cell lysate Lane 3: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 102 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded Human Skeletal muscle section using Pink1(Cat#AM8606b). AM8606b was diluted at 1:400 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

Citations

- Dickkopf-related protein 3 alters aerobic glycolysis in pancreatic cancer BxPC-3 cells, promoting CD4 T-cell activation

and function

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