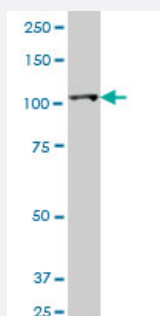


HK2 monoclonal antibody (M01), clone 4H1

Catalog # H00003099-M01

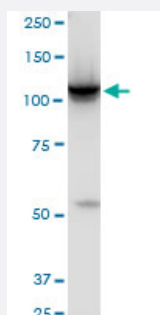
Size 100 ug

Applications



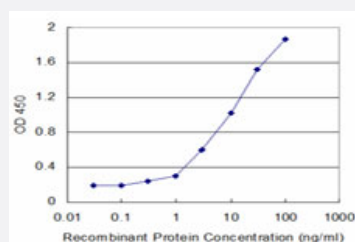
Western Blot (Cell lysate)

HK2 monoclonal antibody (M01), clone 4H1. Western Blot analysis of HK2 expression in A-431 (Cat # L015V1).



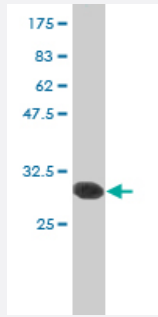
Western Blot (Cell lysate)

HK2 monoclonal antibody (M01), clone 4H1. Western Blot analysis of HK2 expression in PC-12(Cat # L012V1).



Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged HK2 is approximately 0.3ng/ml as a capture antibody.



Western Blot detection against Immunogen (36.63 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant HK2.
Immunogen	HK2 (AAH21116, 818 a.a. ~ 917 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	NKEVCTVVARRAAQLCGAGMAAVVDRIENRGLDALKVTVGVDGTLTKLHPHFAKVMHETVKDL APKCDVSFLQSEDGSGKGAALITAVACRIREAGQR
Host	Mouse
Reactivity	Human, Rat
Interspecies Antigen Sequence	Rat (96)
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

HK2 monoclonal antibody (M01), clone 4H1. Western Blot analysis of HK2 expression in A-431 (Cat # L015V1).

[Protocol Download](#)

- Western Blot (Cell lysate)

HK2 monoclonal antibody (M01), clone 4H1. Western Blot analysis of HK2 expression in PC-12(Cat # L012V1).

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged HK2 is approximately 0.3ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

Gene Info — HK2

Entrez GeneID [3099](#)

GeneBank Accession# [BC021116](#)

Protein Accession# [AAH21116](#)

Gene Name HK2

Gene Alias DKFZp686M1669, HKII, HXK2

Gene Description hexokinase 2

Omim ID [601125](#)

Gene Ontology [Hyperlink](#)

Gene Summary 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. [provided by RefSeq]

Other Designations hexokinase-2, muscle

Publication Reference

- [Hindering NAT8L expression in hepatocellular carcinoma increases cytosolic aspartate delivery that fosters pentose phosphate pathway and purine biosynthesis promoting cell proliferation.](#)

Pamela De Falco, Giacomo Lazzarino, Federica Felice, Enrico Desideri, Serena Castelli, Illari Salvatori, Fabio Ciccarone, Maria Rosa Ciriolo.

Redox Biology 2023 Feb; 59:102585.

Application: WB-Ce, Human, HepG2 cells

- [Adaptive antioxidant response to mitochondrial fatty acid oxidation determines the proliferative outcome of cancer cells.](#)

Serena Castelli, Fabio Ciccarone, Pamela De Falco, Maria Rosa Ciriolo.

Cancer Letters 2022 Feb; 554:216010.

Application: WB-Ce, Human, HeLa cells

- [ROS-dependent HIF1 \$\alpha\$ activation under forced lipid catabolism entails glycolysis and mitophagy as mediators of higher proliferation rate in cervical cancer cells.](#)

Serena Castelli, Fabio Ciccarone, Daniela Tavian, Maria Rosa Ciriolo.

Journal of Experimental & Clinical Cancer Research 2021 Mar; 40(1):94.

Application: WB-Tr, Human, HeLa cells

- [Expression and role in glycolysis of human ADP-dependent glucokinase.](#)

Richter S, Richter JP, Mehta SY, Gribble AM, Sutherland-Smith AJ, Stowell KM, Print CG, Ronimus RS, Wilson WR.

Molecular and Cellular Biochemistry 2012 Jan; 364(1-2):131.

Application: WB, Human, SiHa, C33A, H460, H1299, A549, HT29, HCT116, MDA231, MiaPaca2, A2780, PC3, 22Rv1, HepG2, SCOV3, HCT8, A431, Panc01, H522, Hep3B, DI145, FaDu, H69, H82

Pathway

- [Amino sugar and nucleotide sugar metabolism](#)
- [Biosynthesis of alkaloids derived from histidine and purine](#)
- [Biosynthesis of alkaloids derived from ornithine](#)
- [Biosynthesis of alkaloids derived from shikimate pathway](#)
- [Biosynthesis of alkaloids derived from terpenoid and polyketide](#)
- [Biosynthesis of phenylpropanoids](#)

- [Biosynthesis of plant hormones](#)
- [Biosynthesis of terpenoids and steroids](#)
- [Fructose and mannose metabolism](#)
- [Galactose metabolism](#)
- [Glycolysis / Gluconeogenesis](#)
- [Insulin signaling pathway](#)
- [Metabolic pathways](#)
- [Starch and sucrose metabolism](#)
- [Streptomycin biosynthesis](#)
- [Type II diabetes mellitus](#)