

## Product datasheet for **CF500856**

### Hexokinase II (HK2) Mouse Monoclonal Antibody [Clone ID: OTI4C5]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI4C5
Applications:	FC, IF, WB
Recommended Dilution:	WB 1:1000, IF 1:100, Flow 1:100
Reactivity:	Human, Dog, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human HK2 (NP_000180) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	102.4 kDa
Gene Name:	hexokinase 2
Database Link:	<a href="#">NP_000180</a> <a href="#">Entrez Gene 15277 Mouse</a> <a href="#">Entrez Gene 25059 Rat</a> <a href="#">Entrez Gene 100856448 Dog</a> <a href="#">Entrez Gene 3099 Human</a> <a href="#">P52789</a>



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**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.

**Synonyms:**

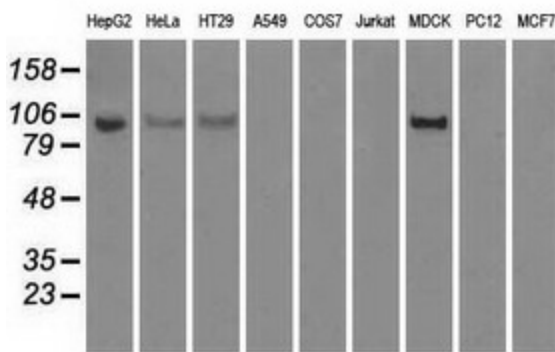
HKII; HXK2

**Protein Families:**

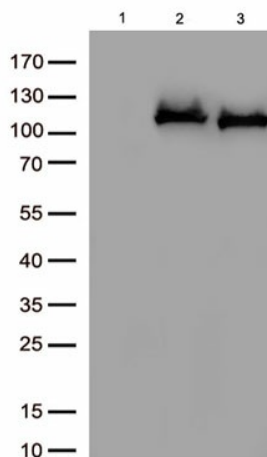
Druggable Genome

**Protein Pathways:**

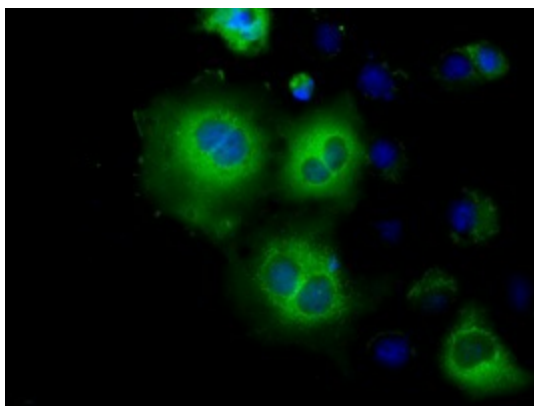
Amino sugar and nucleotide sugar metabolism, Fructose and mannose metabolism, Galactose metabolism, Glycolysis / Gluconeogenesis, Insulin signaling pathway, Metabolic pathways, Starch and sucrose metabolism, Type II diabetes mellitus

**Product images:**


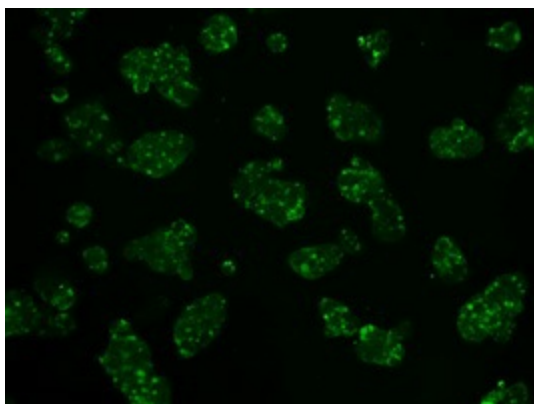
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-HK2 monoclonal antibody.



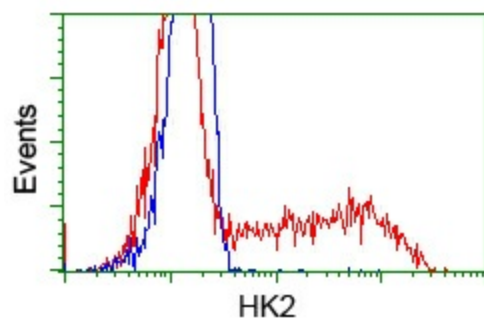
Western blot analysis of overexpressed lysates (15ug per lane) from HEK293T cells transfected with empty plasmid ([PS100001], lane 1), human HK2 plasmid ([RC209482], lane 2), mouse HK2 plasmid ([MR211170], lane 3) using anti-HK2 antibody [TA500856](1:500).



Anti-HK2 mouse monoclonal antibody ([TA500856]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY HK2 ([RC209482]).



Immunofluorescent staining of HepG2 cells using anti-HK2 mouse monoclonal antibody ([TA500856]).



HEK293T cells transfected with either pCMV6-ENTRY HK2 ([RC209482]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-HK2 mouse monoclonal ([TA500856]), and then analyzed by flow cytometry.