

## Product datasheet for **AM06497SU-N**

### Hexokinase II (HK2) Mouse Monoclonal Antibody [Clone ID: 3D3]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	3D3
Applications:	ELISA, FC, IHC, WB
Recommended Dilution:	<b>ELISA:</b> 1/10000. <b>Western Blot:</b> 1/500 - 1/2000. <b>Flow Cytometry:</b> 1/200 - 1/400. <b>Immunohistochemistry on Paraffin Sections:</b> 1/200 - 1/1000.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of Human HK2 expressed in E. Coli.
Specificity:	Recognizes Hexokinase-2 (HK2).
Formulation:	State: Ascites State: Ascitic fluid containing 0.03% Sodium Azide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	102 kDa
Gene Name:	hexokinase 2
Database Link:	<a href="#">Entrez Gene 3099 Human P52789</a>



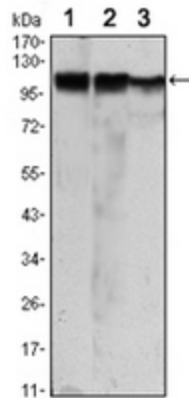
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**Background:**

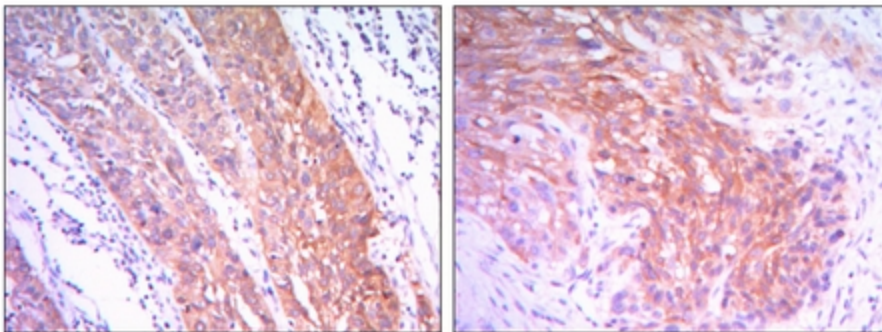
The hexokinases utilize Mg-ATP as a phosphoryl donor to catalyze the first step of intracellular glucose metabolism, the conversion of glucose to glucose- 6-phosphate. Four hexokinase isoenzymes have been identified, including hexokinase I (HXK I), hexokinase II (HXK II), hexokinase III (HXK III) and hexokinase IV (HXK IV, also designated glucokinase or GCK). Hexokinases I-III each contain an N-terminal cluster of hydrophobic amino acids. Glucokinase lacks the N-terminal hydrophobic cluster. The hydrophobic cluster is thought to be necessary for membrane binding. This is substantiated by the finding that glucokinase has lower affinity for glucose than do the other hexokinases. Hexokinase 2 is the predominant hexokinase isozyme expressed in insulin-responsive tissues such as skeletal muscle. 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:**

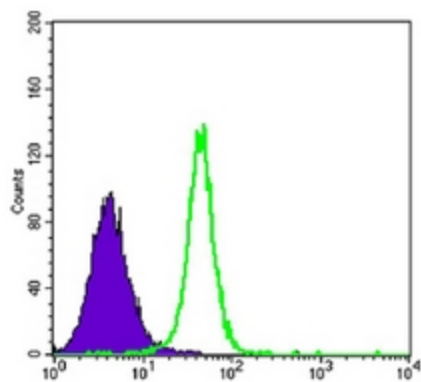
Hexokinase type II, Muscle form hexokinase, HK2, HKII

**Product images:**


Western blot analysis using HK2 antibody Cat.-No AM06497SU-N against Jurkat (1), Hela (2) and HEK293 (3) cell lysate.



Immunohistochemical analysis of paraffin-embedded esophagus cancer tissues (left) and human lung cancer (right) using HK2 antibody Cat.-No AM06497SU-N with DAB staining.



Flow cytometric analysis of K562 cells using HK2 mouse mAb (green) and negative control (purple).