

For Research Use Only

# Hexokinase 2 Monoclonal antibody

Catalog Number: 66974-1-Ig **53 Publications**



## Basic Information

<b>Catalog Number:</b> 66974-1-Ig	<b>GenBank Accession Number:</b> BC021116	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul , Concentration: 1500 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 3099	<b>CloneNo.:</b> 2A11C3
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P52789	<b>Recommended Dilutions:</b> WB 1:5000-1:20000 IHC 1:250-1:1000 IF/ICC 1:375-1:1500
<b>Isotype:</b> IgG1	<b>Full Name:</b> hexokinase 2	
<b>Immunogen Catalog Number:</b> AG16895	<b>Calculated MW:</b> 102 kDa	
	<b>Observed MW:</b> 102 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, FC (Intra), ELISA

**Cited Applications:**  
WB, IHC, IF

**Species Specificity:**  
human, mouse, rat

**Cited Species:**  
human, mouse, rat, pig

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB :** HEK-293 cells, NIH/3T3 cells, LNCaP cells, HeLa cells, HepG2 cells, Jurkat cells, K-562 cells, 4T1 cells

**IHC :** mouse skeletal muscle tissue,

**IF/ICC :** HeLa cells,

## Background Information

Hexokinase 2 (HK2), a rate-limiting enzyme in the first step of glycolysis pathway, expresses at high level in cancer cells compared with normal cells. HK2 provides a new target for cancer therapy due to its pivotal role in tumor tumorigenic and metastatic process. HK1 is constitutively expressed in most mammalian adult tissues. HK2, however, although is abundantly expressed in embryonic tissues, is expressed at high levels only in limited number of adult tissues such as adipose, skeletal, and cardiac muscles. (PMID: 29305912, PMID: 28427443, PMID: 23911236). The antibody also recognizes Hexokinase 1.

## Notable Publications

Author	Pubmed ID	Journal	Application
Mengyuan Li	34558014	Virol Sin	WB
Yanling Gou	36069580	Immunology	IHC
Yubo Zhao	36064939	Cell Death Dis	WB

## Storage

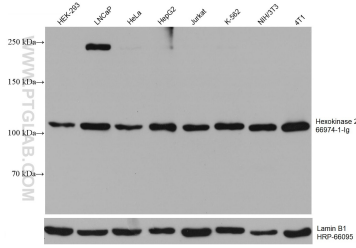
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

**\*\*\* 20ul sizes contain 0.1% BSA**

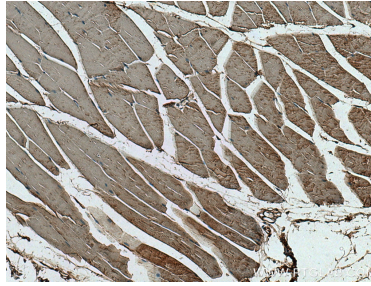
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

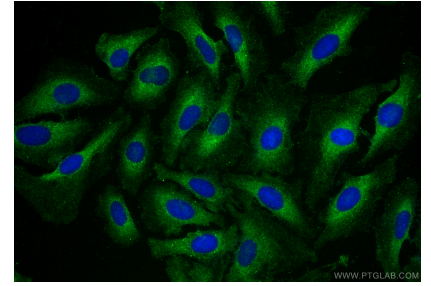
## Selected Validation Data



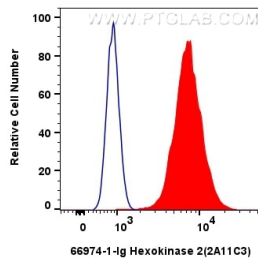
Various lysates were subjected to SDS PAGE followed by western blot with 66974-1-Ig (Hexokinase 2 antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control.



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 66974-1-Ig (Hexokinase 2 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using Hexokinase 2 antibody (66974-1-Ig, Clone: 2A11C3) at dilution of 1:750 and CoraLite@488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).



$1 \times 10^6$  HepG2 cells were intracellularly stained with 0.25  $\mu$ g Hexokinase 2 Monoclonal antibody (66974-1-Ig, Clone:2A11C3) and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1)(red), or 0.25  $\mu$ g Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).