

Hexokinase 2 Monoclonal antibody

Catalog Number: 66974-1-Ig **60 Publications**

Basic Information

Catalog Number:

66974-1-Ig

Size:

150ul, Concentration: 1500 ug/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG16895

GenBank Accession Number:

BC021116

GeneID (NCBI):

3099

UNIPROT ID:

P52789

Full Name:

hexokinase 2

Calculated MW:

102 kDa

Observed MW:

102-120 kDa

Purification Method:

Protein G purification

CloneNo.:

2A11C3

Recommended Dilutions:

WB: 1:5000-1:20000

IHC: 1:250-1:1000

IF/ICC: 1:375-1:1500

FC (Intra): 0.25 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF, ColP

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,

FC (Intra): HepG2 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, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

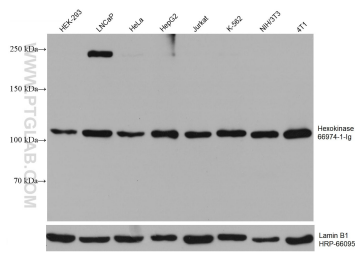
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

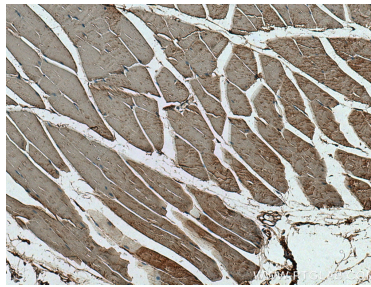
E: proteintech@ptglab.com
 W: ptglab.com

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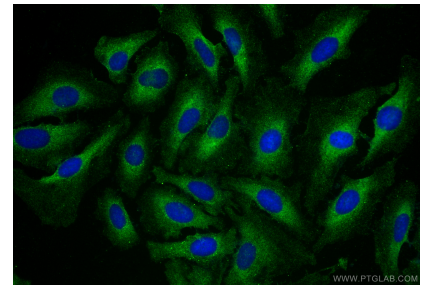
Selected Validation Data



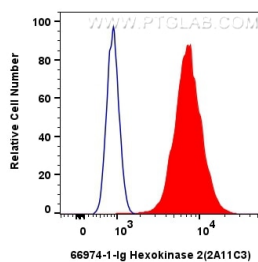
Various lysates were subjected to SDS PAGE followed by western blot with 66974-1-Ig (Hexokinase 2 antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control.



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).



1x10⁶ HepG2 cells were intracellularly stained with 0.25 ug 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 ug 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).