

For Research Use Only

Hexokinase 2 Monoclonal antibody, PBS Only (Detector)

Catalog Number: 66974-1-PBS



Basic Information

Catalog Number: 66974-1-PBS	GenBank Accession Number: BC021116	Purification Method: Protein G purification
Size: 100ug, Concentration: 1mg/ml by Nanodrop;	GeneID (NCBI): 3099	CloneNo.: 2A11C3
Source: Mouse	UNIPROT ID: P52789	
Isotype: IgG1	Full Name: hexokinase 2	
Immunogen Catalog Number: AG16895	Calculated MW: 102 kDa	
	Observed MW: 102 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), Cytometric bead array, Indirect ELISA

Species Specificity:
human, mouse, rat

Product Information

66974-1-PBS targets Hexokinase 2 as part of a matched antibody pair:

MP50448-3: 66974-4-PBS capture and 66974-1-PBS detection (validated in Cytometric bead array)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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.

Storage

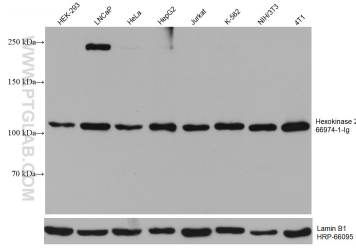
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

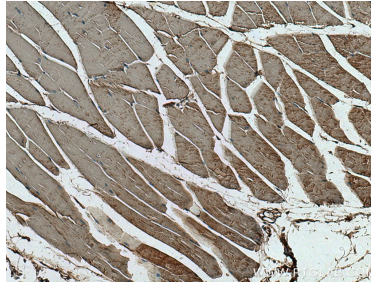
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

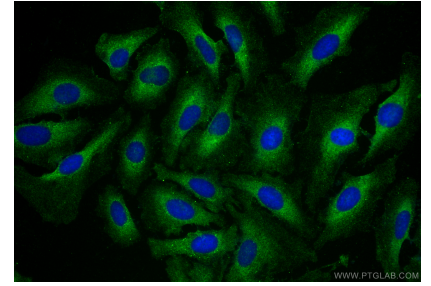
Selected Validation Data



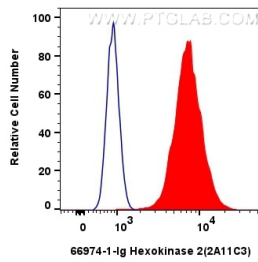
Various lysates were subjected to SDS PAGE followed by western blot with 66974-1-Ig (Hexokinase 2 antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control. This data was developed using the same antibody clone with 66974-1-PBS in a different storage buffer formulation.



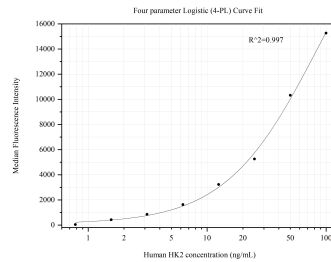
Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 66974-1-Ig (Hexokinase 2 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66974-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 66974-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone.



Cytometric bead array standard curve of MP50448-3, HK2 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 66974-4-PBS. Detection antibody: 66974-1-PBS. Standard:Ag16895. Range: 0.781-100 ng/mL.