

For Research Use Only

PKM2-specific Monoclonal antibody



Catalog Number: 60268-1-Ig

Featured Product

45 Publications

Basic Information

Catalog Number:

60268-1-Ig

Size:

150ul, Concentration: 1000 µg/ml by Nanodrop and 585 µg/ml by Bradford method using BSA as the standard;

Source:

Mouse

Isotype:

IgG1

GenBank Accession Number:

NM_002654

GeneID (NCBI):

5315

UNIPROT ID:

P14618

Full Name:

PKM pyruvate kinase, muscle

Calculated MW:

58 kDa

Observed MW:

58 kDa

Purification Method:

Protein G purification

CloneNo.:

1C11C7

Recommended Dilutions:

WB 1:5000-1:30000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:100-1:1000

IF 1:200-1:800

Applications

Tested Applications:

WB, IP, IF, FC, IHC, ELISA

Cited Applications:

WB, IP, IF, IHC, ICC, CoIP

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse, pig

Positive Controls:

WB : HEK-293 cells, human brain tissue, MCF-7 cells, C6 cells, NIH/3T3 cells, rat brain tissue, HepG2 cells, HSC-T6 cells, ROS1728 cells, 4T1 cells, K-562 cells

IP : HeLa cells,

IHC : human colon cancer tissue,

IF : HeLa cells, HepG2 cells

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

Background Information

PKM, also named as OIP3, PK2, PK3, PKM, p58, THBP1, CTHBP and Tumor M2-PK, belongs to the pyruvate kinase family. It is glycolytic enzyme that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP. It stimulates POU5F1-mediated transcriptional activation. PKM plays a general role in caspase independent cell death of tumor cells. PKM has 2 isoforms, the activity of the M2 isoform can be inhibited by tyrosine kinase signalling in tumour cells. The immunogen of this antibody is M2 isoform and this antibody is specific to PKM2 isoform.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|----------------|-----------|----------------|-------------|
| Teresa W-M Fan | 36150727 | J Immunol | |
| Bin Zhang | 31500508 | Autophagy | WB |
| 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

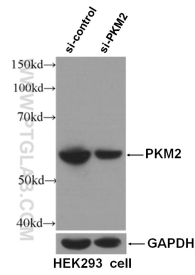
For technical support and original validation data for this product please contact:

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

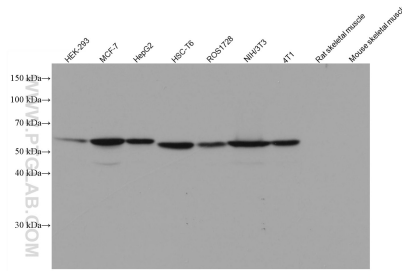
E: proteintech@ptglab.com
W: ptglab.com

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

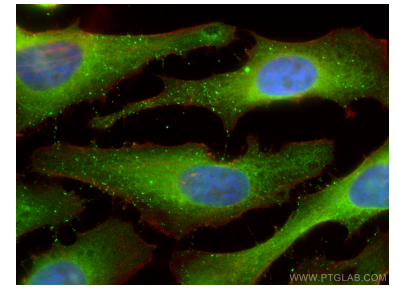
Selected Validation Data



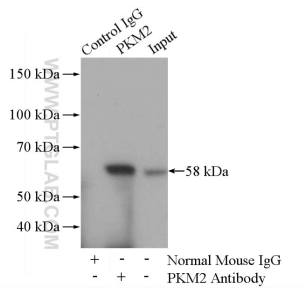
WB result of PKM2 antibody (60268-1-Ig, 1:3000) with si-Control and si-PKM2 transfected HEK293 cells.



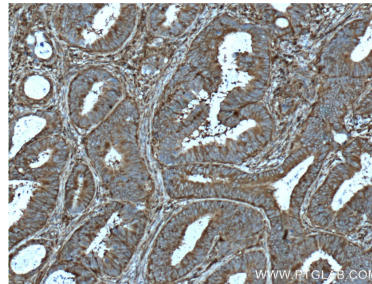
Various lysates were subjected to SDS PAGE followed by western blot with 60268-1-Ig (PKM2-specific antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



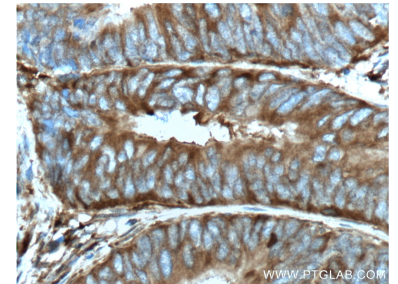
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using PKM2-specific antibody (60268-1-Ig, Clone: 1C11C7) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).



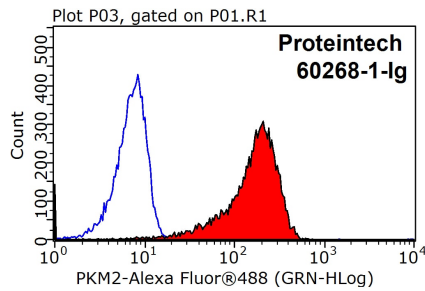
IP result of anti-PKM2-specific (IP:60268-1-Ig, 5ug; Detection:15822-1-AP (PKM2-specific rabbit polyclonal antibody), 1:300) with HeLa cells lysate 2800ug.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 60268-1-Ig (PKM2-specific antibody at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 60268-1-Ig (PKM2-specific antibody at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10⁶ HepG2 cells were stained with .2ug PKM2-specific antibody (60268-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L) with dilution 1:1000.