

For Research Use Only

# PKM1-specific Polyclonal antibody

Catalog Number: 15821-1-AP

Featured Product

89 Publications



## Basic Information

### Catalog Number:

15821-1-AP

### Size:

150ul, Concentration: 450 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_182470

### GeneID (NCBI):

5315

### UNIPROT ID:

P14618

### Full Name:

PKM pyruvate kinase, muscle

### Calculated MW:

58 kDa

### Observed MW:

58 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:5000-1:50000

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

IHC: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, monkey, bovine

**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** : mouse brain tissue, mouse skeletal muscle tissue, multi-cells/tissue, mouse muscle/liver tissues, mouse heart tissue, 293 cell, HepG2/MCF7 cells, mouse colon tissue, rat brain tissue

**IP** : mouse brain tissue,

**IHC** : human gliomas tissue, human skeletal muscle tissue, human brain tissue, human heart tissue, mouse heart tissue

## 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 named PKM1 and PKM2. The primary pyruvate kinase isoform before tumour development is PK-M1; however, the primary isoform from four independent tumours is PK-M2 (PMID:18337823). This antibody is specific to PKM1 isoform.

## Notable Publications

Author	Pubmed ID	Journal	Application
Stefano Miglietta	36287116	Noncoding RNA	WB
Bo Ma	30235220	PLoS One	WB
Di Huang	30224822	Nat Immunol	

## 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

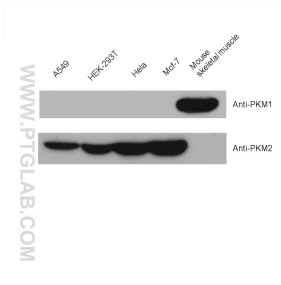
For technical support and original validation data for this product please contact:

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

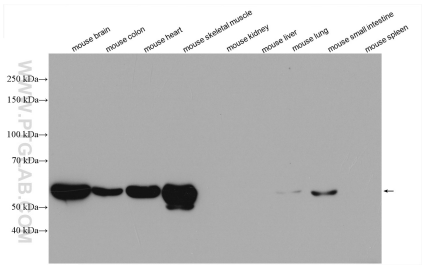
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

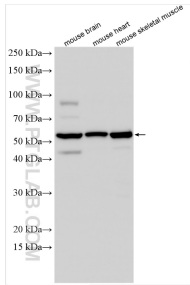
Selected Validation Data



mouse skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 15821-1-AP (PKM1-specific antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



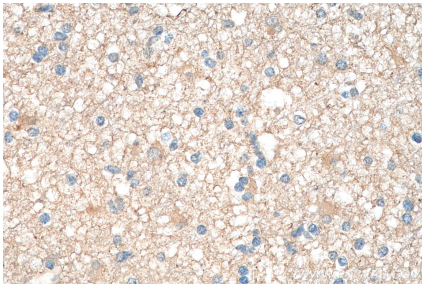
Various lysates were subjected to SDS PAGE followed by western blot with 15821-1-AP (PKM1-specific antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



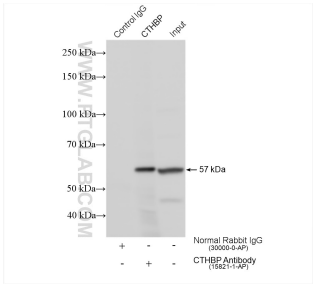
Various lysates were subjected to SDS PAGE followed by western blot with 15821-1-AP (PKM1-specific antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



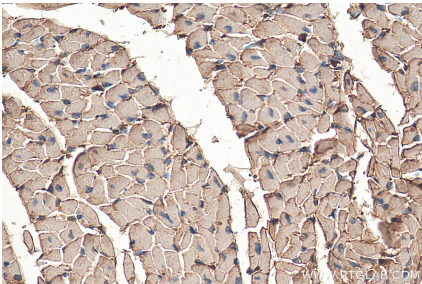
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 15821-1-AP (PKM1-specific antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 15821-1-AP (PKM1-specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-PKM1-specific (IP:15821-1-AP, 4ug; Detection:15821-1-AP 1:40000) with mouse brain tissue lysate 1680 ug.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 15821-1-AP (PKM1-specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).