

# PKM1-specific Polyclonal antibody

Catalog Number: 15821-1-AP

Featured Product

74 Publications

## Basic Information

## Catalog Number:

15821-1-AP

## Size:

450 µg/ml

## 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 1:1000-1:4000

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

IHC 1:50-1:500

## Applications

## Tested Applications:

IHC, IP, WB, ELISA

## Cited Applications:

CoIP, IF, IHC, IP, WB

## Species Specificity:

human, mouse, rat

## Cited Species:

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

**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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

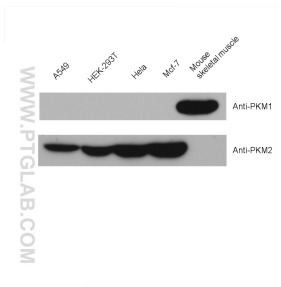
For technical support and original validation data for this product please contact:

T: 4006900926

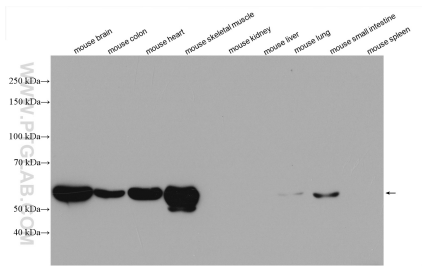
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

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

Selected Validation Data



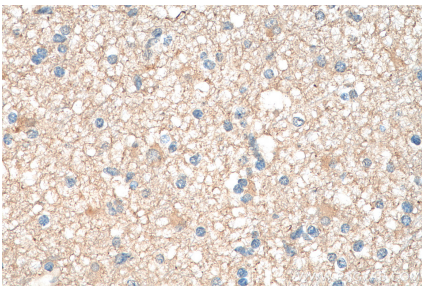
mouse skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 15821-1-AP (PKM1-specific antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



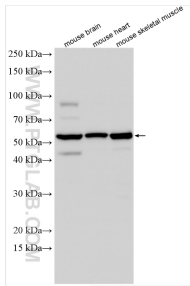
Various lysates were subjected to SDS PAGE followed by western blot with 15821-1-AP (PKM1-specific antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



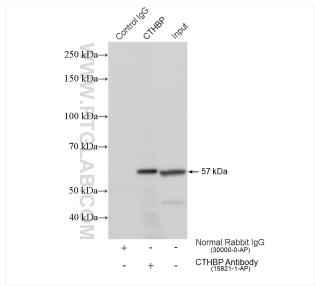
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 15821-1-AP (PKM1-specific antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



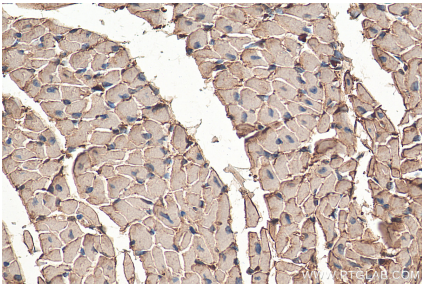
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 15821-1-AP (PKM1-specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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.



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).