

For Research Use Only

# PKM2-specific Polyclonal antibody

Catalog Number: 15822-1-AP

Featured Product

249 Publications



## Basic Information

### Catalog Number:

15822-1-AP

### Size:

150ul, Concentration: 800 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### 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:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:2000-1:12000

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

IHC: 1:100-1:400

IF/ICC: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP, ChIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, chicken, 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**: A549 cells, 293 cell, C6 cells, HEK-293 cells, HeLa cells, N/A, Recombinant protein, HEK-293T cells, MCF-7 cells, mouse stomach tissue

**IP**: A549 cells, MCF-7 cells

**IHC**: human lung cancer tissue, human colon cancer tissue

**IF/ICC**: HeLa cells, MCF-7 cells

## 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 as PKM1/M2. The activity of the M2 isoform (but not the M1 isoform) can be inhibited by tyrosine kinase signalling in tumour cells. The primary pyruvate kinase isoform before tumour development is PK-M1; however, the primary isoform from four independent tumours is PK-M2 (PMID:18337823). The immunogen of this antibody is M2 isoform and this antibody is specific to PKM2 isoform. This antibody can detect PKM2 monomer, dimer and tetramer (PMID: 36196894).

## Notable Publications

Author	Pubmed ID	Journal	Application
Xiao Liang	36212974	Evid Based Complement Alternat Med	IF
Peng Yang	30259036	Food Funct	WB
Stefano Miglietta	36287116	Noncoding RNA	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

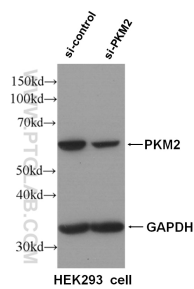
For technical support and original validation data for this product please contact:

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

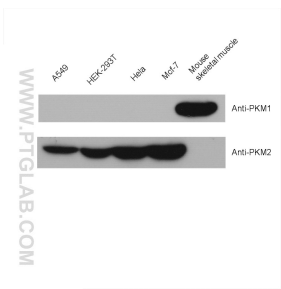
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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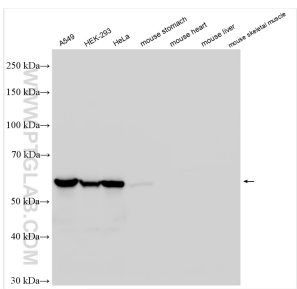
Selected Validation Data



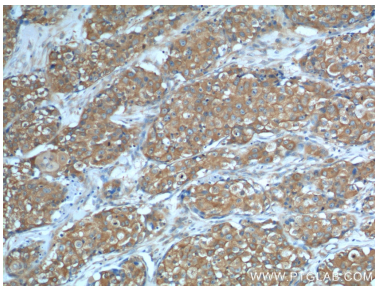
WB result of PKM2 specific antibody (15822-1-AP, 1:5000) with si-control and si-PKM2 transfected HEK293 cells.



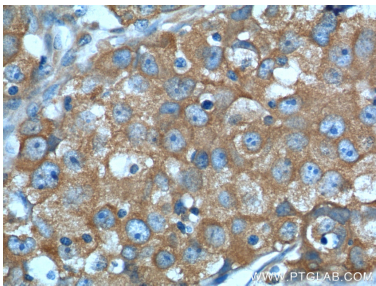
Various lysates were subjected to SDS PAGE followed by western blot with 15822-1-AP (PKM2-specific antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



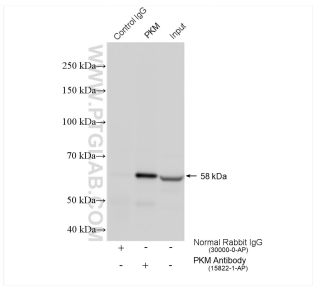
Various lysates were subjected to SDS PAGE followed by western blot with 15822-1-AP (PKM2-specific antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours. Negative control: mouse heart tissue, mouse liver tissue, mouse skeletal muscle tissue.



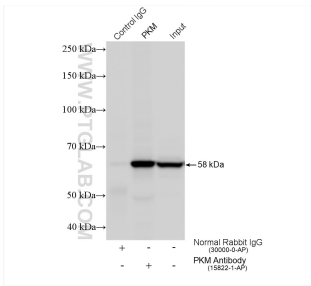
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 15822-1-AP (PKM2-specific antibody) at dilution of 1:200 (under 10x lens).



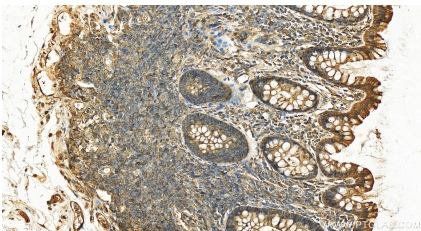
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 15822-1-AP (PKM2-specific antibody) at dilution of 1:200 (under 40x lens).



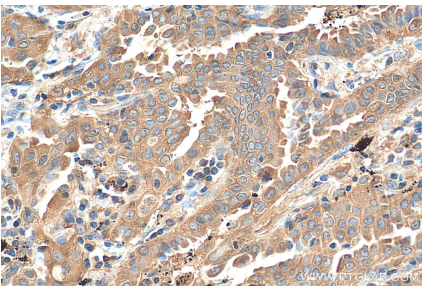
IP result of anti-PKM2-specific (IP:15822-1-AP, 4ug; Detection:15822-1-AP 1:4000) with A549 cells lysate 920 ug.



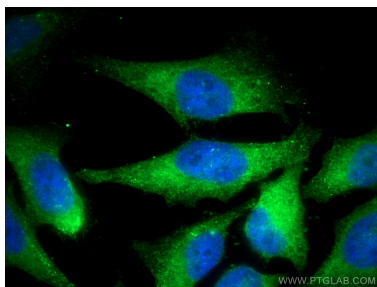
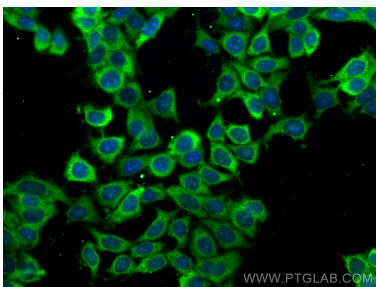
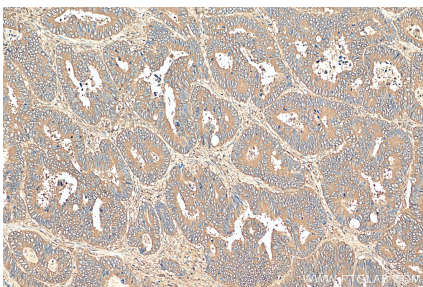
IP result of anti-PKM2-specific (IP:15822-1-AP, 4ug; Detection:15822-1-AP 1:2000) with MCF-7 cells lysate 1880 ug.



Immunohistochemical analysis of paraffin-embedded human normal colon slide using 15822-1-AP (PKM2-specific antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 15822-1-AP (PKM2-specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 15822-1-AP (PKM2-specific antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunofluorescent analysis of (-20°C Ethanol) fixed MCF-7 cells using PKM2-specific antibody (15822-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

Immunofluorescent analysis of (4% PFA) fixed HeLa cells using PKM2-specific antibody (15822-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).