

For Research Use Only

# PKM Polyclonal antibody

Catalog Number: 10078-2-AP

Featured Product

30 Publications



## Basic Information

### Catalog Number:

10078-2-AP

### Concentration:

500 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0110

### GenBank Accession Number:

BC000481

### 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

IHC: 1:250-1:1000

IF/ICC: 1:200-1:800

FC (Intra): 0.40 µg per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig

**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:** HeLa cells, multi-cells/tissue, Raji cells, SH-SY5Y cells, Jurkat cells, MCF-7 cells, SKOV-3 cells, NIH/3T3 cells, HepG2 cells, HEK-293 cells, rat skeletal muscle tissue, mouse brain tissue, mouse muscle tissue, mouse heart tissue

**IHC:** human colon cancer tissue,

**IF/ICC:** HeLa cells,

**FC (Intra):** HepG2 cells,

## Background Information

PKM, also named as OIP3, PK2, PK3, PKM1/2, 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 can be inhibited by tyrosine kinase signalling in tumour cells. The primary pyruvate kinase isoform before tumour development is PKM1; however, the primary isoform from four independent tumours is PKM2.(PMID:18337823). This antibody can recognize both PKM1 and PKM2.

## Notable Publications

Author	Pubmed ID	Journal	Application
Li-Jun Wen	34956471	Am J Transl Res	WB, IHC
Liangliang Fu	28345649	Sci Rep	WB
Yang Yang	31211620	Am J Physiol Endocrinol Metab	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

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

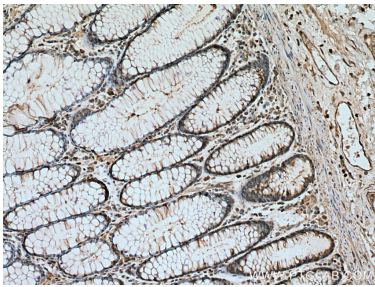
T: 4006900926

E: Proteintech-CN@ptglab.com

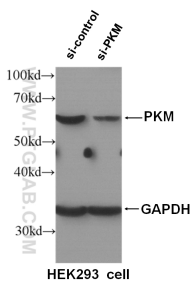
W: ptgcn.com

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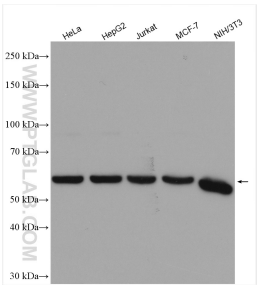
Selected Validation Data



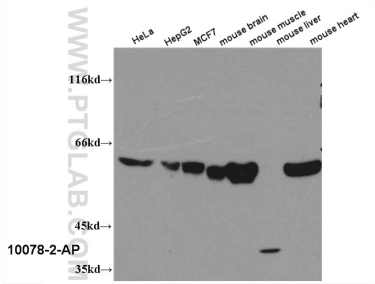
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10078-2-AP (PKM antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



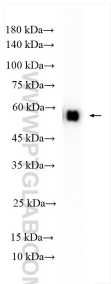
WB result of PKM antibody (10078-2-AP, 1:1000) with si-Control and si-PKM transfected HEK293 cells.



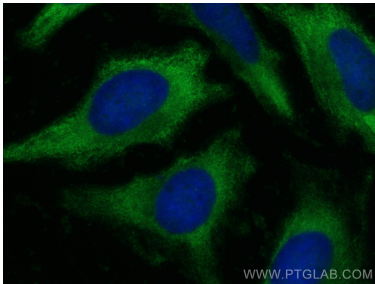
Various lysates were subjected to SDS PAGE followed by western blot with 10078-2-AP (PKM antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



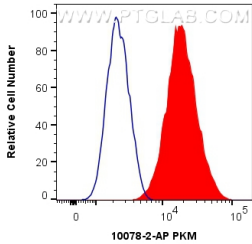
WB result of 10078-2-AP (PKM antibody) with various lysates.



rat skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 10078-2-AP (PKM antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using PKM antibody (10078-2-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 ug Anti-Human PKM (10078-2-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).