

For Research Use Only

# PKM2-specific Recombinant antibody

Catalog Number: 84451-1-RR



## Basic Information

<b>Catalog Number:</b> 84451-1-RR	<b>GenBank Accession Number:</b> NM_002654	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul, Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5315	<b>CloneNo.:</b> 241431E8
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P14618	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:250-1:1000 IF/ICC 1:125-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> PKM pyruvate kinase, muscle	
	<b>Calculated MW:</b> 58 kDa	
	<b>Observed MW:</b> 58 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, FC (Intra), ELISA	<b>Positive Controls:</b> WB : U2OS cells, HeLa cells, HEK-293 cells, A549 cells, MDA-MB-231 cells IHC : human colon cancer tissue, IF/ICC : HeLa cells,
<b>Species Specificity:</b> human	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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.

## Storage

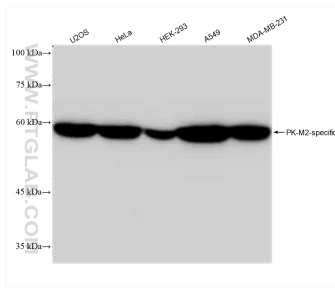
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

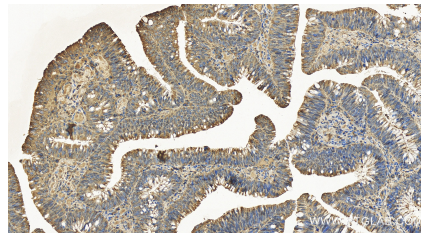
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com W: ptglab.com

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

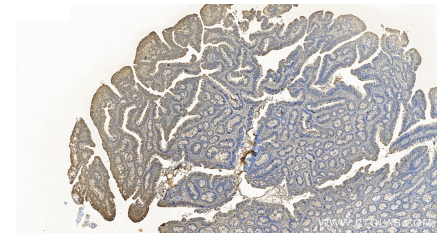
## Selected Validation Data



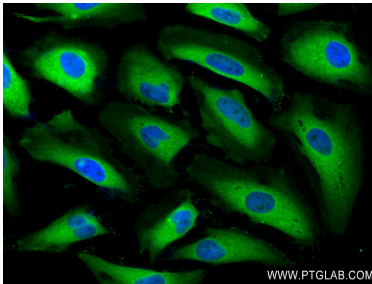
Various lysates were subjected to SDS PAGE followed by western blot with 84451-1-RR (PK-M2-specific antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



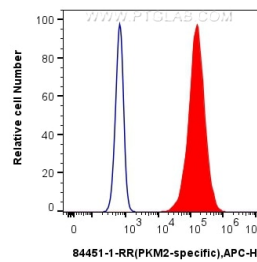
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 84451-1-RR (PKM2-specific antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



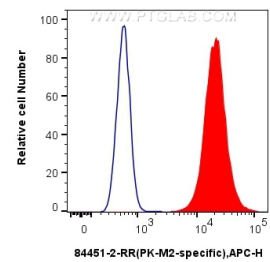
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 84451-1-RR (PKM2-specific antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using PKM2-specific antibody (84451-1-RR, Clone: 241431E8) at dilution of 1:250 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



$1 \times 10^6$  HeLa cells were intracellularly stained with 0.25 ug PKM2-specific Recombinant antibody (84451-1-RR, Clone:241431E8) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



$1 \times 10^6$  HepG2 cells were intracellularly stained with 0.25 ug PKM2-specific Recombinant antibody (84451-1-RR, Clone:241431E8) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).