

For Research Use Only

PKM Polyclonal antibody

Catalog Number: 10078-2-AP

Featured Product

28 Publications



Basic Information

Catalog Number:

10078-2-AP

Size:

150ul, Concentration: 300 ug/ml by Nanodrop and 140 ug/ml by Bradford method using BSA as the standard;

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

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,

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 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)

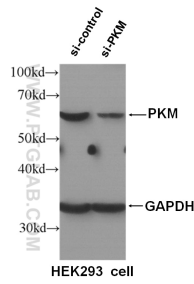
E: proteintech@ptglab.com
W: ptglab.com

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

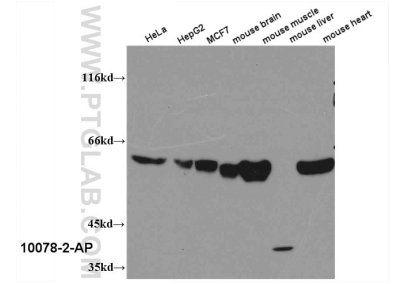
Selected Validation Data



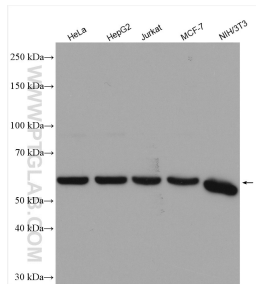
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10078-2-AP (PKM antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



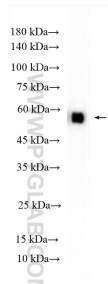
WB result of PKM antibody (10078-2-AP, 1:1000) with si-Control and si-PKM transfected HEK293 cells.



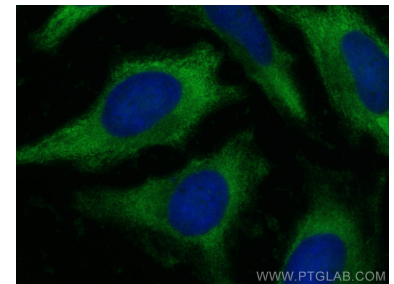
WB result of 10078-2-AP (PKM antibody) with various lysates.



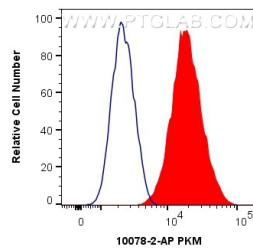
Various lysates were subjected to SDS PAGE followed by western blot with 10078-2-AP (PKM antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



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).



1X10⁶ 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).