For Research Use Only

PKM1-specific Polyclonal antibody

Catalog Number:15821-1-AP Featured Product 86 Publications

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Basic Information

Catalog Number:
15821-1-AP

Size:
150ul , Concentration: 450 ug/ml by Nanodrop;

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 1:5000-1:50000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500

Applications

Tested Applications:
WB, IHC, IP, ELISA

Cited Applications:
WB, IHC, IF, IP, CoIP

Species Specificity:
human, mouse, rat

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

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	

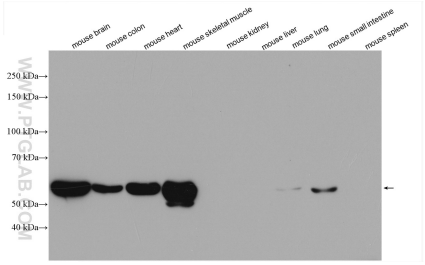
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

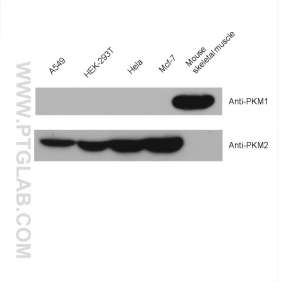
*** 20ul sizes contain 0.1% BSA

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
W: ptglab.com

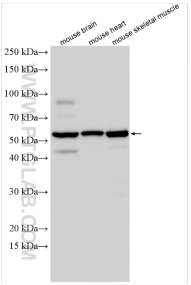
Selected Validation Data



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.

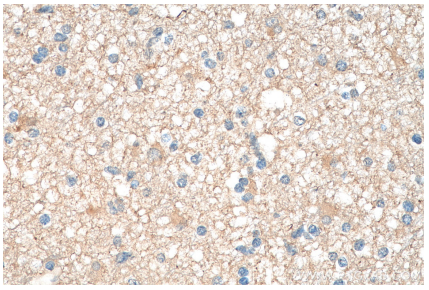


mouse skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 15821-1-AP (PKM1-specific antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.

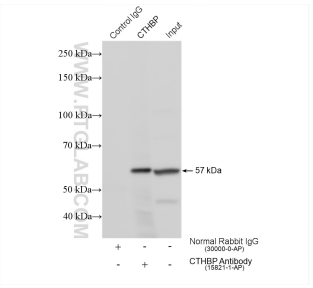


Various lysates were subjected to SDS PAGE followed by western blot with 15821-1-AP (PKM1-specific antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.

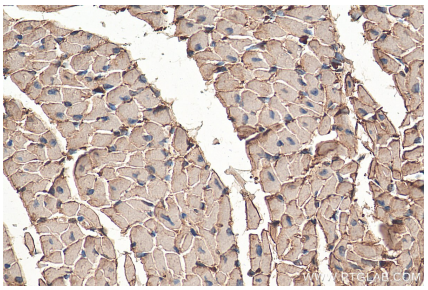
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 15821-1-AP (PKM1-specific antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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).