For Research Use Only

PKM Polyclonal antibody

Catalog Number: 10078-2-AP

Featured Product

17 Publications



Basic Information

Catalog Number: GenBank Accession Number: 10078-2-AP BC000481

Size: GeneID (NCBI): 5315

Source: UNIPROT ID: Rabbit P14618

Isotype: Full Name:

gG PKM pyruvate kinase, muscle

Immunogen Catalog Number: Calculated MW: AG0110 58 kDa

Observed MW: 58 kDa Purification Method: Antigen affinity purification Recommended Dilutions: WB 1:1000-1:4000

IHC 1:250-1:1000 IF 1:200-1:800

Applications

Tested Applications: FC, IF/ICC, IHC, WB, ELISA Cited Applications:

IF, IHC, WB
Species Specificity:
human, mouse, rat
Cited Species:

human, rat, mouse, 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: 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 tumourcells. 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.

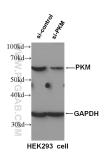
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

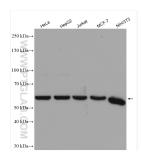
Selected Validation Data



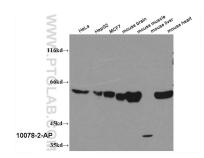
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 10078-2-AP (PKM antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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



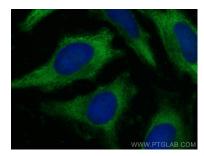
Various lysates were subjected to SDS PAGE followed by western blot with 10078-2-AP (PKM antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



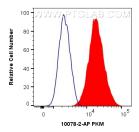
WB result of 10078-2-AP (PKM antibody) with various lysates.



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 AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10^6 HepG2 cells were intracellularly stained with 0.4 ug Anti-Human PKM (10078-2-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgC(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).