For Research Use Only

PKM Polyclonal antibody

Catalog Number: 10078-2-AP

Featured Product

17 Publications



Basic Information

Applications

Catalog Number: 10078-2-AP

GenBank Accession Number:

Purification Method: Antigen affinity purification

Size:

BC000481 GeneID (NCBI):

Recommended Dilutions:

150ul, Concentration: 300 µg/ml by Nanodrop and 140 μ g/ml by Bradford Full Name:

5315

58 kDa

WB 1:1000-1:4000

PKM pyruvate kinase, muscle

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

method using BSA as the standard;

Rabbit Isotype: Calculated MW: 58 kDa Observed MW:

IgG

Immunogen Catalog Number:

AG0110

Positive Controls:

Tested Applications: FC, IF, IHC, WB, ELISA **Cited Applications:** IF, IHC, WB

Species Specificity: human, mouse, rat

Cited Species: human, rat, mouse, pig 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,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

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

Store at -20°C. Stable for one year after shipment.

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

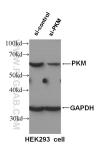
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

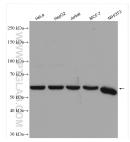
Selected Validation Data



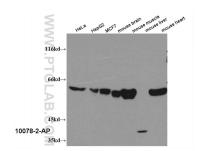
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 10078-2-AP (PKM antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



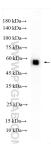
WB result of PKM antibody (10078-2-AP, 1:1000) with si-Control and si-PKM transfected HEK293 cells



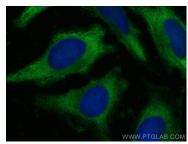
Various lysates were subjected to SDS PAGE followed by western blot with 10078-2-AP (PKM antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



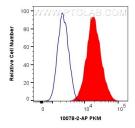
WB result of 10078-2-AP (PKM antibody) with various lysates.



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).