For Research Use Only

PKM2-specific Monoclonal antibody

Catalog Number:60268-1-lg Featured Product

41 Publications



Basic Information

Catalog Number: GenBank Accession Number: 60268-1-lg NM 002654

GeneID (NCBI): CloneNo.: Size:

150ul, Concentration: 1000 µg/ml by 5315 101107 Nanodrop and 585 μ g/ml by Bradford Full Name:

method using BSA as the standard; PKM pyruvate kinase, muscle

Calculated MW: Mouse 58 kDa Isotype: Observed MW: lgG1 58 kDa

Tested Applications:

FC, IF, IHC, IP, WB, ELISA **Cited Applications:** CoIP, ICC, IF, IHC, IP, WB Species Specificity:

human, mouse, rat **Cited Species:** human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Purification Method: Protein G purification

Recommended Dilutions:

WB 1:5000-1:30000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:100-1:1000 IF 1:200-1:800

Applications

Positive Controls:

WB: HEK-293 cells, human brain tissue, MCF-7 cells, C6 cells, NIH/3T3 cells, rat brain tissue, HepG2 cells, HSC-T6 cells, ROS1728 cells, 4T1 cells, K-562 cells

IP: HeLa cells.

IHC: human colon cancer tissue. IF: HeLa cells, HepG2 cells

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, the activity of the M2 isoform can be inhibited by tyrosine kinase signalling in tumourcells. The immunogen of this antibody is M2 isoform and this antibody is specific to PKM2 isoform.

Notable Publications

Author	Pubmed ID	Journal	Application
Teresa W-M Fan	36150727	J Immunol	
Bin Zhang	31500508	Autophagy	WB
Yubo Zhao	36064939	Cell Death Dis	WB

Storage

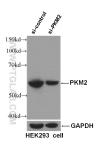
Store at -20°C. Stable for one year after shipment.

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

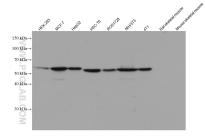
*** 20ul sizes contain 0.1% BSA

Aliquoting is unnecessary for -20°C storage

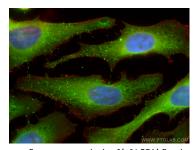
Selected Validation Data



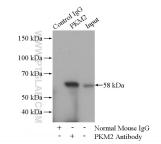
WB result of PKM2 antibody (60268-1-lg, 1:3000) with si-Control and si-PKM2 transfected HEK293 cells



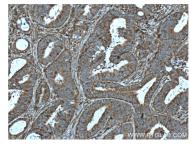
Various lysates were subjected to SDS PAGE followed by western blot with 60268-1-lg (PKM2-specific antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



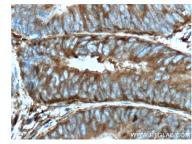
Immun of luorescent analysis of (4% PFA) fixed HeLa cells using PKM2-specific antibody (60268-1-Ig, Clone: 1C11C7) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).



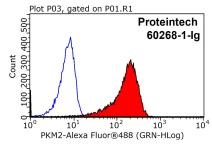
IP Result of anti-PKM2-specific (IP:60268-1-Ig, 5ug; Detection:15822-1-AP (PKM2-specific rabbit polyantibody), 1:300) with HeLa cells lysate 2800ug.



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 60268-1-lg (PKM2-specific antibody at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 60268-1-Ig (PKM2-specific antibody at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 HepG2 cells were stained with .2ug PKM2-specific antibody (60268-1-lg, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L) with dilution 1:1000.