For Research Use Only

PKM2-specific Recombinant monoclonal antibody, PBS Only

Catalog Number:84451-1-PBS



Basic Information

Catalog Number:

GenBank Accession Number:

Purification Method: Protein A purfication

84451-1-PBS Source: NM_002654 GeneID (NCBI):

CloneNo.: 241431E8

Rabbit Isotype:

UNIPROT ID: P14618 Full Name:

PKM pyruvate kinase, muscle

Calculated MW: 58 kDa Observed MW: 58 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), Indirect ELISA

Species Specificity:

human

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 as PKM1/M2. The activity of the M2 isoform (but not the M1 isoform) can be inhibited by tyrosine kinase signalling in tumourcells. The primary pyruvate kinase isoform before tumour development is PK-M1; however, the primary isoform from four independent tumours is PK-M2 (PMID:18337823). The immunogen of this antibody is M2 isoform and this antibody is specific to PKM2 isoform.

Storage

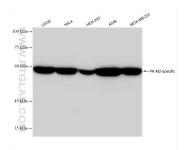
Storage:

Store at -80°C.

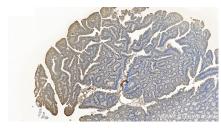
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS only, pH7.3

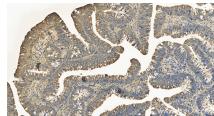
Selected Validation Data



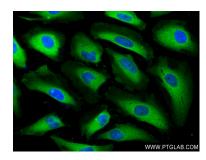
Various lysates were subjected to SDS PAGE followed by western blot with 84451-1-RR (PK-M2-specific antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84451-1-PBS in a different storage buffer formulation.



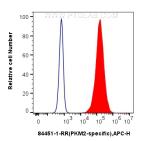
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 84451-1-RR (PKM2-specific antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84451-1-PBS in a different storage buffer formulation.



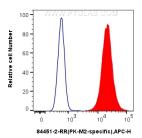
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 84451-1-RR (PKM2-specific antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84451-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using PKM2-specific antibody (84451-1-RR, Clone: 241431E8) at dilution of 1:250 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (5A00013-2). This data was developed using the same antibody clone with 84451-1-PBS in a different storage buffer formulation.



1x10^6 HeLa cells were intracellularly stained with 0.25 ug PKM2-specific Recombinant antibody (84451-1-RR, Clone:241431E8) and APC-Conjugated Goat Anti-Rabbit 1gG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer. This data was developed using the same antibody clone with 84451-1-PBS in a different storage buffer formulation.



1x10^6 HepG2 cells were intracellularly stained with 0.25 ug PKM2-specific Recombinant antibody (84451-1-RR, Clone:241431E8) and APC-Conjugated Goat Anti-Rabbit 1gG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer. This data was developed using the same antibody clone with 84451-1-PBS in a different storage buffer formulation.