Immunoway
Best Tools for immunology Research

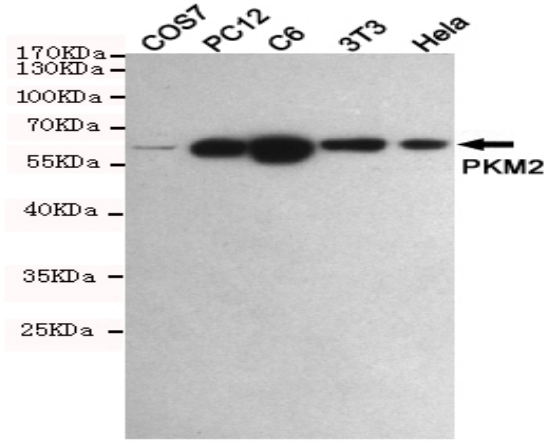
PKM2 mouse mAb

Catalog No :	YM1323
Reactivity :	Human;Mouse;Rat;Monkey
Applications :	WB;IF
Target :	PKM2
Fields :	>>Glycolysis / Gluconeogenesis;>>Pyruvate metabolism;>>Metabolic pathways;>>Carbon metabolism;>>Biosynthesis of amino acids;>>Glucagon signaling pathway;>>Type II diabetes mellitus;>>Human papillomavirus infection;>>Viral carcinogenesis;>>Central carbon metabolism in cancer
Gene Name :	pkm2
Human Gene Id :	5315
Human Swiss Prot No :	P14618
Mouse Swiss Prot No :	P52480
Immunogen :	Purified recombinant human PKM2 protein fragments expressed in E.coli.
Specificity :	This antibody detects endogenous levels of PKM2 and does not cross-react with related proteins.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	wb 1:1000 icc 1:400. IF 1:50-200
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

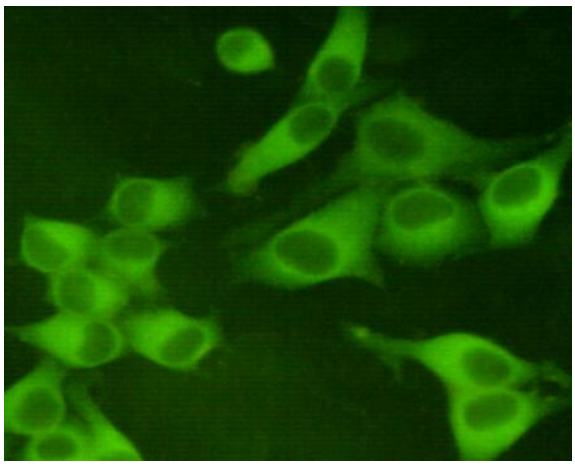
Observed Band :	60kD
Cell Pathway :	Glycolysis / Gluconeogenesis;Purine metabolism;Pyruvate metabolism;Type II diabetes mellitus;
Background :	This gene encodes a protein involved in glycolysis. The encoded protein is a pyruvate kinase that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate to ADP, generating ATP and pyruvate. This protein has been shown to interact with thyroid hormone and may mediate cellular metabolic effects induced by thyroid hormones. This protein has been found to bind Opa protein, a bacterial outer membrane protein involved in gonococcal adherence to and invasion of human cells, suggesting a role of this protein in bacterial pathogenesis. Several alternatively spliced transcript variants encoding a few distinct isoforms have been reported. [provided by RefSeq, May 2011],
Function :	catalytic activity:ATP + pyruvate = ADP + phosphoenolpyruvate.,cofactor:Divalent metal cations.,cofactor:Magnesium.,cofactor:Potassium.,enzyme regulation:Isoform M2 is allosterically activated by D-fructose 1,6-biphosphate (FBP). Inhibited by oxalate and 3,3',5-triiodo-L-thyronine (T3).,function:Glycolytic enzyme that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP.,miscellaneous:There are 4 isozymes of pyruvate kinase in mammals: L, R, M1 and M2. L type is major isozyme in the liver, R is found in red cells, M1 is the main form in muscle, heart and brain, and M2 is found in early fetal tissues as well as in most cancer cells.,online information:Pyruvate kinase entry,pathway:Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 5/5.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Be
Subcellular Location :	[Isoform M2]: Cytoplasm . Nucleus . Translocates to the nucleus in response to various signals, such as EGF receptor activation or apoptotic stimuli (PubMed:17308100, PubMed:22056988, PubMed:24120661). Nuclear translocation is promoted by acetylation by EP300 (PubMed:24120661). Deacetylation by SIRT6 promotes its nuclear export in a process dependent of XPO4, thereby suppressing its ability to activate transcription and promote tumorigenesis (PubMed:26787900). .; [Isoform M1]: Cytoplasm .
Expression :	[Isoform M2]: Specifically expressed in proliferating cells, such as embryonic stem cells, embryonic carcinoma cells, as well as cancer cells. ; [Isoform M1]: Expressed in adult tissues (PubMed:18337823). Not expressed in tumor cells (PubMed:18337823).
Sort :	12791
No4 :	1
Host :	Mouse

Modifications : Unmodified

Products Images



Western blot detection of PKM2 in COS7,PC12,C6,3T3 and Hela cell lysates using PKM2 mouse mAb (1:1000 diluted).Predicted band size:60KDa.Observed band size:60KDa.



Immunocytochemistry staining of Hela cells fixed with 4% Paraformaldehyde and using anti-PKM2 mouse mAb (dilution 1:400).