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Anti-PKM2 Antibody

Mouse Anti Human Monoclonal Antibody
Catalog # AP53402

Product Information

Application	WB, IF
Primary Accession	P14618
Other Accession	NM_002654
Reactivity	Human, Mouse, Rat, Monkey
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Immunogen	Purified recombinant human PKM2 protein fragments expressed in E.coli.
Purification	Affinity purified
Calculated MW	57937

Additional Information

Gene ID	5315
Other Names	CTHBP;Cytosolic thyroid hormone binding protein;Cytosolic thyroid hormone-binding protein;KPYM_HUMAN;MGC3932;OIP 3;OIP-3;OIP3;OPA interacting protein 3;Opa-interacting protein 3;p58;PK muscle type;PK, muscle type;PK2;PK3;PKM;PKM2;pykm;Pyruvate kinase 2/3;Pyruvate kinase 3;Pyruvate kinase isozymes M1/M2;Pyruvate kinase muscle;Pyruvate kinase muscle isozyme;pyruvate kinase PKM;Pyruvate kinase, muscle 2;TCB;THBP1;Thyroid hormone binding protein 1;Thyroid hormone binding protein cytosolic;Thyroid hormone-binding protein 1;Tumor M2 PK;Tumor M2-PK.
Dilution	WB~~1:1000 IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.02% sodium azide, pH 7.4.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

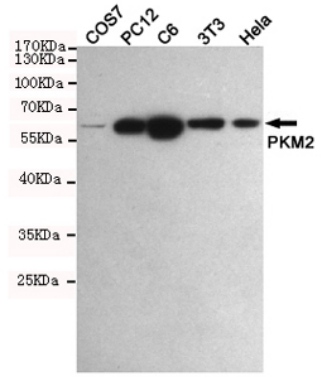
Name	PKM
Synonyms	OIP3 {ECO:0000303|PubMed:9466265}, PK2,
Function	Catalyzes the final rate-limiting step of glycolysis by mediating the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP (PubMed:15996096, PubMed:1854723, PubMed:20847263). The ratio between the highly active tetrameric form and nearly inactive dimeric form

	determines whether glucose carbons are channeled to biosynthetic processes or used for glycolytic ATP production (PubMed:15996096, PubMed:1854723, PubMed:20847263). The transition between the 2 forms contributes to the control of glycolysis and is important for tumor cell proliferation and survival (PubMed:15996096, PubMed:1854723, PubMed:20847263).
Cellular Location	[Isoform M2]: Cytoplasm. Nucleus Note=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).
Tissue Location	[Isoform M2]: Specifically expressed in proliferating cells, such as embryonic stem cells, embryonic carcinoma cells, as well as cancer cells.

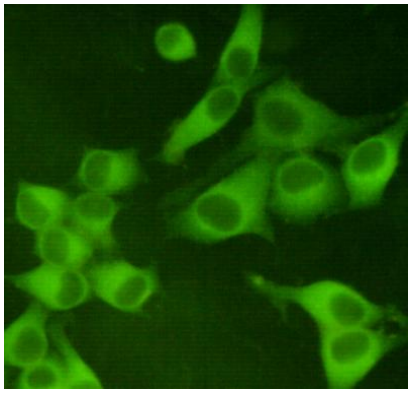
Background

Glycolytic enzyme that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP. Stimulates POU5F1-mediated transcriptional activation. Plays a general role in caspase independent cell death of tumor cells. The ra

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).