

Anti-PKM2 Antibody

Mouse Anti Human Monoclonal Antibody Catalog # AP53402

Specification

Anti-PKM2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Immunogen

P14618 NM_002654 Human, Mouse, Rat, Monkey Mouse Monoclonal IgG1 Purified full-length of recombinant human PKM2 protein expressed in E.coli. Affinity purified 60 KDa

Purification Calculated MW

Anti-PKM2 Antibody - 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.

WB, ICC

Dilution WB~~1:1000 ICC~~1:400

Format

Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-PKM2 Antibody - 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:1854723, 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:2084723, PubMed:20847263, PubMed:<a href="http://www.uniprot.org/citations/20847263" t

href="http://www.uniprot.org/citations/15996096" target="_blank">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.

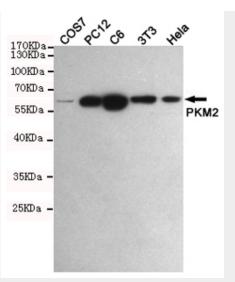
Anti-PKM2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

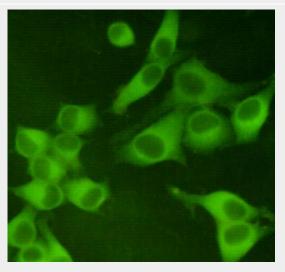
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-PKM2 Antibody - 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).

Anti-PKM2 Antibody - 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