10320 Camino Santa Fe, Suite G
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PKM / Pyruvate Kinase Antibody
Rabbit Polyclonal Antibody
Catalog # ALS17073

Specification

PKM / Pyruvate Kinase Antibody - Product Information

Application	**IHC, IF, WB**
Primary Accession	P14618
Other Accession	5315
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**57937**

PKM / Pyruvate Kinase Antibody - Additional Information

Gene ID 5315

Other Names
PKM, p58, PK3, PKM2, Pyruvate Kinase, Pyruvate kinase 2/3, Pyruvate kinase, m1, Pyruvate kinase, muscle, TCB, Tumor M2-PK, OIP-3, OIP3, Opa-interacting protein 3, CTHBP, PK, muscle type, PK2, Pyruvate kinase isozymes M1/M2, Pyruvate kinase muscle iso ...

Target/Specificity
Human PKM / Pyruvate Kinasex

Reconstitution & Storage
PBS, pH 7.3, 0.02% sodium azide, 50% glycerol. Long term: -80°C; Short term: -20°C. Avoid freeze-thaw cycles.

Precautions
PKM / Pyruvate Kinase Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PKM / Pyruvate Kinase 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:20847263, PubMed:15996096, PubMed:1854723). 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:20847263, PubMed:15996096, PubMed:1854723). The transition between the 2 forms contributes to the control of glycolysis and is important for tumor cell proliferation and survival (PubMed:20847263, PubMed:15996096, PubMed:1854723).

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.

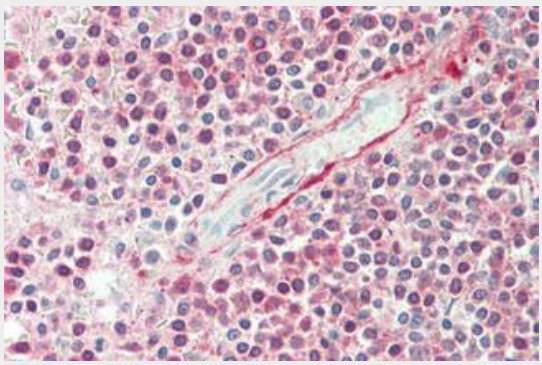
Volume
50 µl

PKM / Pyruvate Kinase Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PKM / Pyruvate Kinase Antibody - Images



Human Spleen: Formalin-Fixed, Paraffin-Embedded (FFPE)

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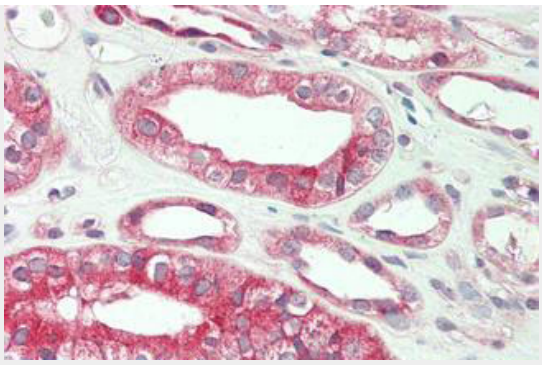
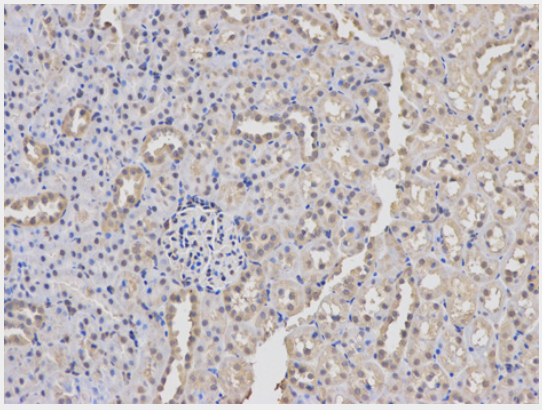
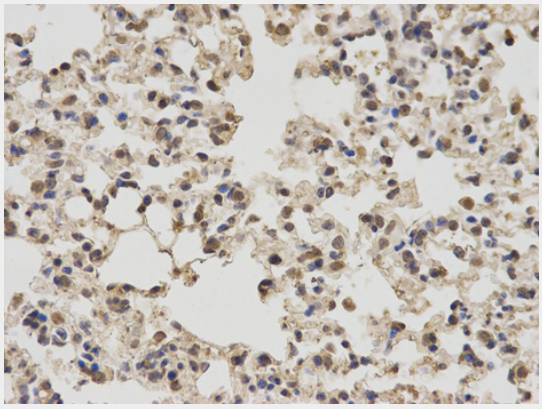


Human Kidney: Formalin-Fixed, Paraffin-Embedded (FFPE)



Immunohistochemistry of paraffin-embedded rat kidney using PKM2 antibody at dilution of 1:100...



Immunohistochemistry of paraffin-embedded mouse lung using PKM2 antibody at dilution of 1:100...

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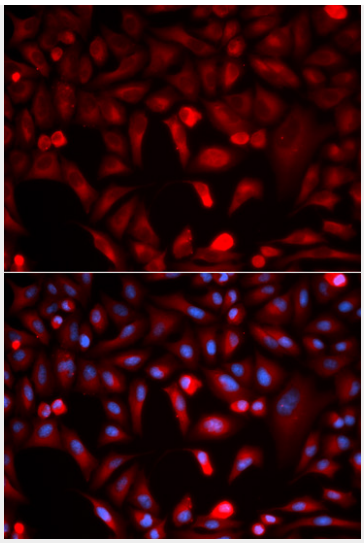
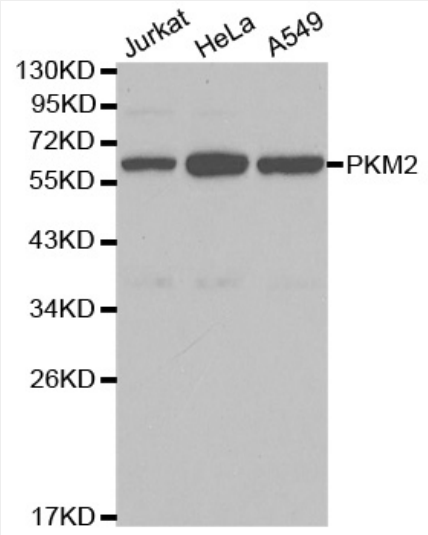


Immunofluorescence analysis of HeLa cell using PKM2 antibody. Blue: DAPI for nuclear staining.



Western blot analysis of extracts of various cell lines, using PKM2 antibody.

PKM / Pyruvate Kinase 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 ratio betwween 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. The transition between the 2 forms contributes to the control of glycolysis and is important for tumor cell proliferation and survival.

PKM / Pyruvate Kinase Antibody - References

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