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PKM2 Antibody (C-term C474)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7173b

Specification

PKM2 Antibody (C-term C474) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P14618
Other Accession	P11974
Reactivity	**Human**
Predicted	**Rabbit**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Calculated MW	**57937**
Antigen Region	**460-489**

PKM2 Antibody (C-term C474) - Additional Information

Gene ID 5315

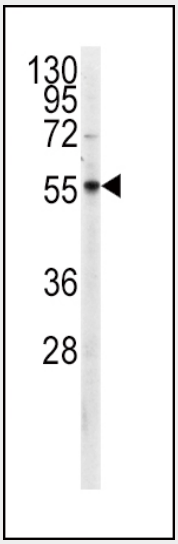
Other Names
Pyruvate kinase PKM, Cytosolic thyroid hormone-binding protein, CTHBP, Opa-interacting protein 3, OIP-3, Pyruvate kinase 2/3, Pyruvate kinase muscle isozyme, Thyroid hormone-binding protein 1, THBP1, Tumor M2-PK, p58, PKM, OIP3, PK2, PK3, PKM2

Target/Specificity
This PKM2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 460-489 amino acids from the C-terminal region of human PKM2.

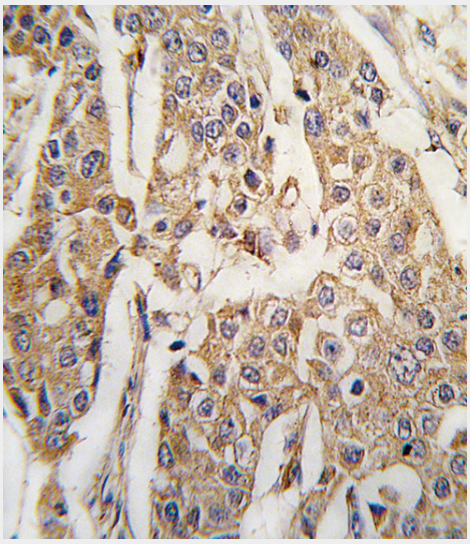
Dilution
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage



Western blot analysis of anti-PKM2 Antibody (C-term C474)(Cat.#AP7173b) in CEM cell line lysates (35ug/lane). PKM2(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with PKM2 antibody (C-term C474) (Cat.#AP7173b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
PKM2 Antibody (C-term C474) is for research use only and not for use in diagnostic or therapeutic procedures.

PKM2 Antibody (C-term C474) - Protein Information

Name PKM

Synonyms OIP3, PK2, PK3, PKM2

Function
Glycolytic enzyme that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP (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: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:15996096, PubMed:1854723). In addition to its role in glycolysis, also regulates transcription (PubMed:18191611, PubMed:21620138). Stimulates POU5F1-mediated transcriptional activation (PubMed:<a href="http://www.un

immunohistochemistry; clinical relevance has not been evaluated.

PKM2 Antibody (C-term C474) - Background

PKM2 is a pyruvate kinase that catalyzes the production of phosphoenolpyruvate from pyruvate and ATP. This protein has been shown to interact with thyroid hormone, and thus 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.

PKM2 Antibody (C-term C474) - References

Lehner, B., et al., Genome Res. 14(7):1315-1323 (2004).
Gevaert, K., et al., Nat. Biotechnol. 21(5):566-569 (2003).
Valentini, G., et al., J. Biol. Chem. 277(26):23807-23814 (2002).
Lowrie, D.J. Jr., et al., J. Struct. Biol. 132(2):83-94 (2000).
Williams, J.M., et al., Mol. Microbiol. 27(1):171-186 (1998).

iprot.org/citations/18191611" target="_blank">18191611). Promotes in a STAT1-dependent manner, the expression of the immune checkpoint protein CD274 in ARNTL/BMAL1-deficient macrophages (By similarity). Also acts as a translation regulator for a subset of mRNAs, independently of its pyruvate kinase activity: associates with subpools of endoplasmic reticulum-associated ribosomes, binds directly to the mRNAs translated at the endoplasmic reticulum and promotes translation of these endoplasmic reticulum-destined mRNAs (By similarity). Plays a general role in caspase independent cell death of tumor cells (PubMed:17308100).

Cellular Location
Cytoplasm. Nucleus Note=Translocates to the nucleus in response to different apoptotic stimuli. Nuclear translocation is sufficient to induce cell death that is caspase independent, isoform-specific and independent of its enzymatic activity.

Tissue Location
Specifically expressed in proliferating cells, such as embryonic stem cells, embryonic carcinoma cells, as well as cancer cells.

PKM2 Antibody (C-term C474) - 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