

**PKM2 Antibody (C-term C474)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7173b**

**Specification**

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**PKM2 Antibody (C-term C474) - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P14618</a>
Other Accession	<a href="#">P11974</a>
Reactivity	<b>Human</b>
Predicted	<b>Rabbit</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>57937</b>
Antigen Region	<b>460-489</b>

**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**

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 {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

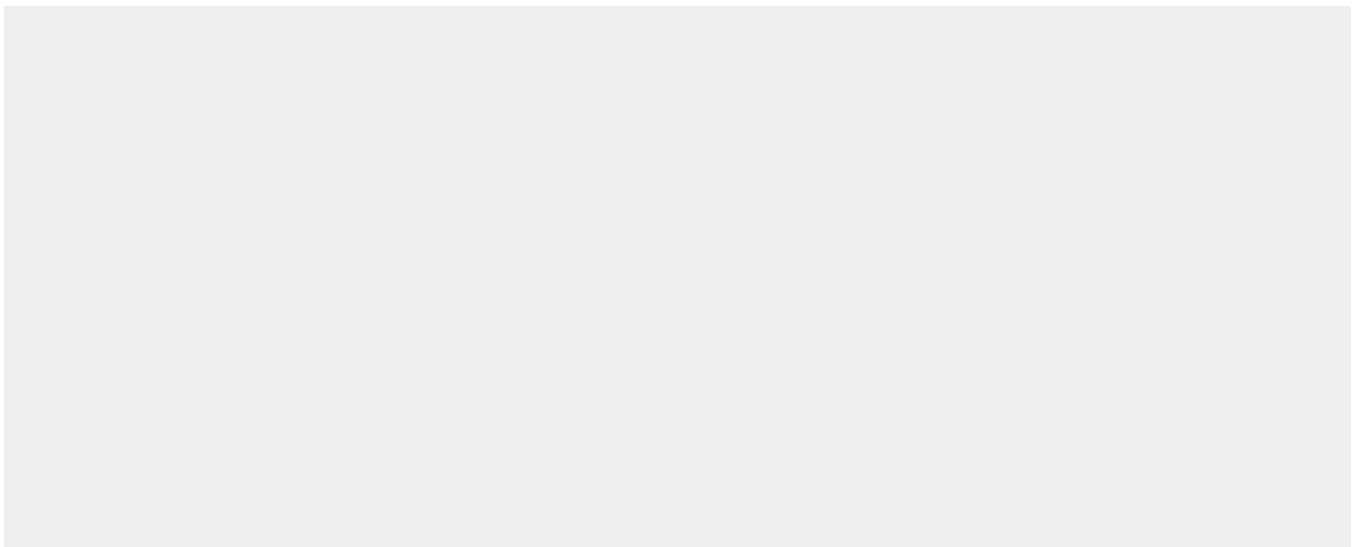
[Isoform M2]: Specifically expressed in proliferating cells, such as embryonic stem cells, embryonic carcinoma cells, as well as cancer cells.

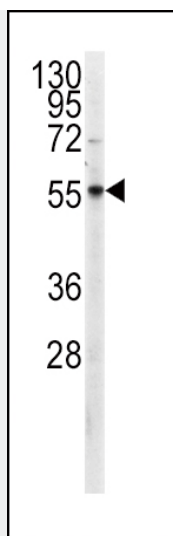
## PKM2 Antibody (C-term C474) - Protocols

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

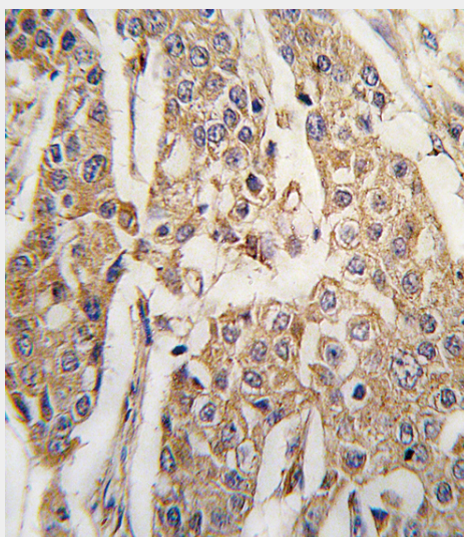
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## PKM2 Antibody (C-term C474) - Images





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 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).