

**Anti-PKM2 Antibody**  
**Mouse Anti Human Monoclonal Antibody**  
**Catalog # AP53402****Specification**

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**Anti-PKM2 Antibody - Product Information**

Application	WB, IF
Primary Accession	<a href="#">P14618</a>
Other Accession	<a href="#">NM_002654</a>
Reactivity	Human, Mouse, Rat, Monkey
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Immunogen	Purified full-length of recombinant human PKM2 protein expressed in E.coli.
Purification	Affinity purified
Calculated MW	60 KDa

**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.

**Dilution**

WB~~1:1000

IF~~1:50~200

**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:<a href="http://www.uniprot.org/citations/15996096" target="\_blank">15996096</a>, PubMed:<a href="http://www.uniprot.org/citations/1854723" target="\_blank">1854723</a>, PubMed:<a href="http://www.uniprot.org/citations/20847263" target="\_blank">20847263</a>). 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:<a href="http://www.uniprot.org/citations/15996096" target="\_blank">15996096</a>, PubMed:<a href="http://www.uniprot.org/citations/1854723" target="\_blank">1854723</a>, PubMed:<a href="http://www.uniprot.org/citations/20847263" target="\_blank">20847263</a>). The transition between the 2 forms contributes to the control of glycolysis and is important for tumor cell proliferation and survival (PubMed:<a href="http://www.uniprot.org/citations/15996096" target="\_blank">15996096</a>, PubMed:<a href="http://www.uniprot.org/citations/1854723" target="\_blank">1854723</a>, PubMed:<a href="http://www.uniprot.org/citations/20847263" target="\_blank">20847263</a>).

### 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

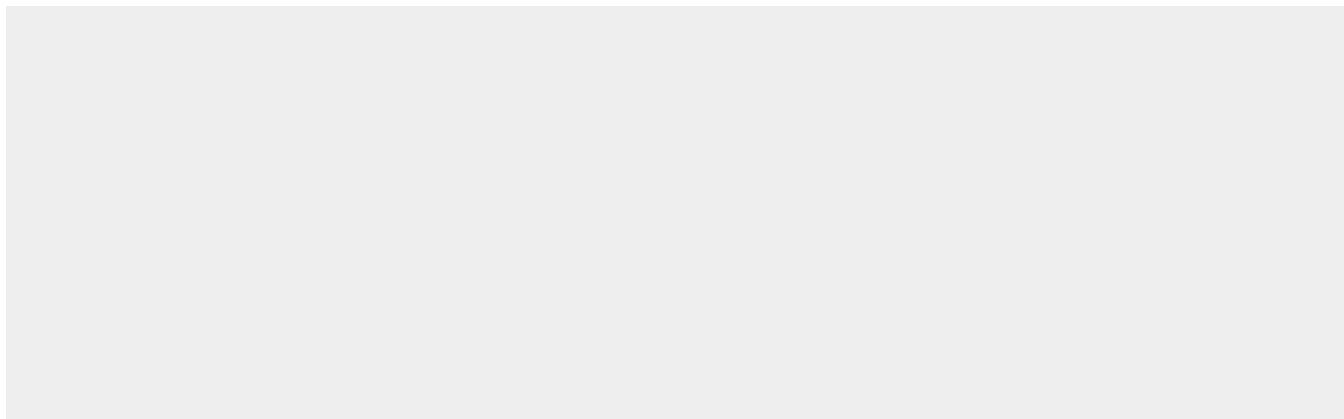
[Isoform M2]: Specifically expressed in proliferating cells, such as embryonic stem cells, embryonic carcinoma cells, as well as cancer cells.

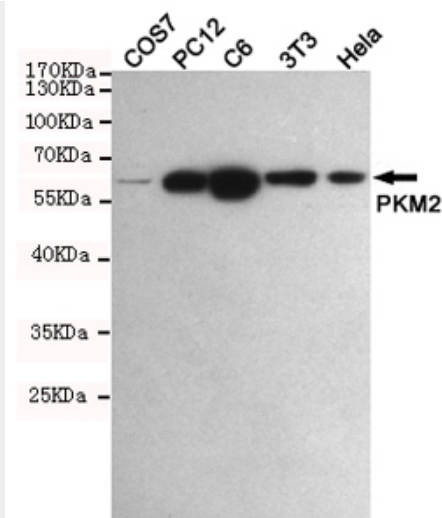
## Anti-PKM2 Antibody - Protocols

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

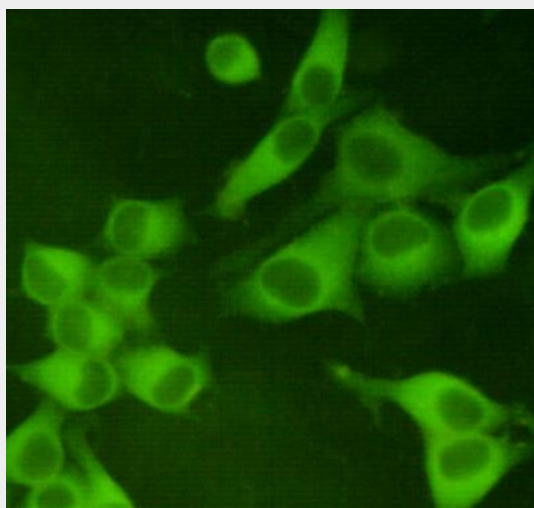
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## 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