

## **Anti-PKM2 Antibody**

Mouse Anti Human Monoclonal Antibody Catalog # AP53402

## **Specification**

## **Anti-PKM2 Antibody - Product Information**

Application WB, IF
Primary Accession P14618
Other Accession NM\_002654

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 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>, 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>, PubMed:<a href="http://www.uniprot.org/citations/20847263" target="\_blank">20847

 $\label{lem:http://www.uniprot.org/citations/15996096"} $$ 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.

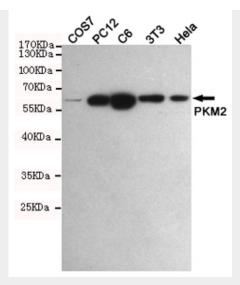
#### **Anti-PKM2 Antibody - Protocols**

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

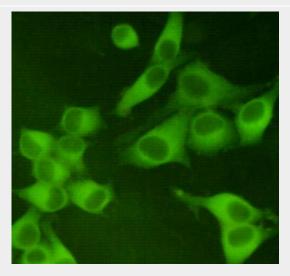
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# 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