

### Anti-PKM2 Rabbit Monoclonal Antibody

Catalog # ABO13433

#### Specification

### Anti-PKM2 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format Description WB, IHC, IF, ICC, FC <u>P14618</u> Rabbit Rabbit IgG Rat, Human, Mouse Monoclonal Liquid

Anti-PKM2 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

#### Anti-PKM2 Rabbit Monoclonal Antibody - Additional Information

Gene ID 5315

**Other Names** 

Pyruvate kinase PKM, 2.7.1.40, Cytosolic thyroid hormone-binding protein, CTHBP, Opa-interacting protein 3, OIP-3, Pyruvate kinase 2/3, Pyruvate kinase muscle isozyme, Threonine-protein kinase PKM2, 2.7.11.1, Thyroid hormone-binding protein 1, THBP1, Tumor M2-PK, Tyrosine-protein kinase PKM2, 2.7.10.2, p58, PKM, OIP3 {ECO:0000303|PubMed:9466265}, PK2, PK3, PKM2

Calculated MW 57937 MW KDa

Application Details WB 1:1000-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>FC 1:50

Subcellular Localization

Cytoplasm. Nucleus. 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 Specificity**

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

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human PKM2

Purification



Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

## Anti-PKM2 Rabbit Monoclonal 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/15996096" target="\_blank">1854723</a>, PubMed:<a href="http://www.uniprot.org/citations/1894723" 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.

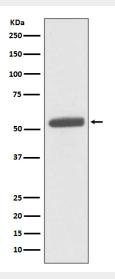
## Anti-PKM2 Rabbit Monoclonal Antibody - Protocols

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

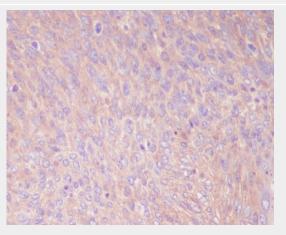
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>



# Anti-PKM2 Rabbit Monoclonal Antibody - Images



Western blot analysis of PKM2 expression in HeLa cell lysate.



Immunohistochemical analysis of paraffin-embedded human cervix cancer, using PKM2 Antibody.