

Anti-Pyruvate Kinase Antibody

Rabbit polyclonal antibody to Pyruvate Kinase Catalog # AP61538

## Specification

# Anti-Pyruvate Kinase Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB <u>P14618</u> <u>P52480</u> Human, Mouse, Rat Rabbit Polyclonal 57937

## Anti-Pyruvate Kinase Antibody - Additional Information

Gene ID 5315

**Other Names** 

OIP3; PK2; PK3; PKM2; 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

Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Pyruvate Kinase. The exact sequence is proprietary.

Dilution WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C.Stable for 12 months from date of receipt

## Anti-Pyruvate Kinase 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/1854723" 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**

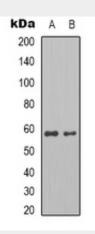
[Isoform M2]: Specifically expressed in proliferating cells, such as embryonic stem cells, embryonic carcinoma cells, as well as cancer cells.

# Anti-Pyruvate Kinase 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-Pyruvate Kinase Antibody - Images



Western blot analysis of Pyruvate Kinase expression in MCF7 (A), HepG2 (B) whole cell lysates.



# Anti-Pyruvate Kinase Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Pyruvate Kinase. The exact sequence is proprietary.