

PKM2 Antibody

Rabbit mAb Catalog # AP90765

Product Information

| Application Primary Accession Reactivity Clonality Other Names | WB, IHC, IF, FC, ICC, IHF <u>P14618</u> Rat, Human, Mouse Monoclonal CTHBP; Cytosolic thyroid hormone binding protein; KPYM; OIP 3; Oip3; OIP3; OPA interacting protein 3; p58; PK Muscle type; muscle type; PK2; Pk3; PKM; |
|--|--|
| lsotype | Rabbit IgG |
| Host | Rabbit |
| Calculated MW | 57937 |

Additional Information

| Dilution Purification Immunogen | WB 1:1000~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50 Affinity-chromatography A synthesized peptide derived from human PKM2 |
|---------------------------------------|---|
| Description | Pyruvate kinase is a glycolytic enzyme that catalyses the conversion of phosphoenolpyruvate to pyruvate. PKM2 is shown to be essential for aerobic glycolysis in tumors, known as the Warburg effect. |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

Protein Information

| Name | РКМ |
|-------------------|--|
| 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: <u>15996096</u> , PubMed: <u>1854723</u> , PubMed: <u>20847263</u>). 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: <u>15996096</u> , PubMed: <u>1854723</u> , PubMed: <u>20847263</u>). The transition between the 2 forms contributes to the control of glycolysis and is important for tumor cell proliferation and survival (PubMed: <u>15996096</u> , PubMed: <u>1854723</u> , PubMed: <u>20847263</u>). |
| 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.

Images



Image not found : 202311/AP90765-IHC.jpg

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

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