PKM Polyclonal ANTIBODY

Catalog Number: 10078-2-AP

For Research Use Only

Basic Information

- **Catalog Number:** 10078-2-AP
- **Size:** 21 μg/150 μl
- **Source:** Rabbit
- **Isotype:** IgG
- **Purification Method:** Antigen affinity purification
- **Immunogen Catalog Number:** AG0110

**Catalog Number:** 10078-2-AP

- **GenBank Accession Number:** BC000481
- **Full Name:** PKM pyruvate kinase, muscle
- **Calculated MW:** 58 kDa
- **Observed MW:** 58 kDa

**Recommended Dilutions:**

- **WB:** 1:1000-1:4000
- **IF:** 1:50-1:500

**Applications**

- **Tested Applications:** IF, IHC, WB, ELISA
- **Cited Applications:** WB
- **Species Specificity:** human, mouse
- **Cited Species:** human, mouse, pig, rat

**Note-IHC:** suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Positive Controls:**

- **WB:** HeLa cells; multi-cells/tissue, HepG2 cells, SH-SY5Y cells, Jurkat cells, MCF-7 cells, SKOV-3 cells, NIH/3T3 cells, HEK-293 cells, Raji cells, mouse brain tissue, mouse muscle tissue, mouse heart tissue
- **IHC:** human colon cancer tissue;
- **IF:** HeLa cells;

**Background Information**

PKM, also named as OIP3, PK2, PK3, PK-M1/2, p58, THBP1, CTHBP and Tumor M2-PK, belongs to the pyruvate kinase family. It is a glycolytic enzyme that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP. It stimulates POU5F1-mediated transcriptional activation. PKM plays a general role in caspase independent cell death of tumor cells. PKM has 2 isoforms named as PKM1/M2. The activity of the M2 isoform (but not the M1 isoform) can be inhibited by tyrosine kinase signalling in tumour cells. The primary pyruvate kinase isoform before tumour development is PK-M1; however, the primary isoform from four independent tumours is PK-M2 (PMID:18337823). This antibody can recognize both PK-M1 and PK-M2.

**Notable Publications**

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
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<tbody>
<tr>
<td>Liangliang Fu</td>
<td>28346649</td>
<td>Sci Rep</td>
<td>WB</td>
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<td>Yang Yang</td>
<td>31211620</td>
<td>Am J Physiol Endocr Metab</td>
<td>WB</td>
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<td>Yu Yanyan Y</td>
<td>23752568</td>
<td>Analyst</td>
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**Storage**

- **Store at:** -20°C. Stable for one year after shipment.
- **Storage Buffer:** PBS with 0.1% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20°C storage**

For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8408 (outside USA)

E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
Selected Validation Data

WB result of PKM antibody (10078-2-AP, 1:1000) with si-Control and si-PKM transfected HEK293 cells.

WB result of 10078-2-AP (PKM antibody) with various lysates.

Various lysates were subjected to SDS-PAGE followed by western blot with 10078-2-AP (PKM antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.

Immunohistochemical analysis of paraffin-embedded human colon cancer using 10078-2-AP (PKM antibody) at dilution of 1:50 (under 10x lens).

Immunohistochemical analysis of paraffin-embedded human colon cancer using 10078-2-AP (PKM antibody) at dilution of 1:50 (under 40x lens).

Immunofluorescent analysis of (-20 Ethanol) fixed HeLa cells using 10078-2-AP (PKM antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).