

# Product datasheet for AM50349PU-N

#### OriGene Technologies, Inc.

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## PKM2 (PKM) Mouse Monoclonal Antibody [Clone ID: AT1B10]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: AT1B10
Applications: ELISA, WB

Recommended Dilution: The antibody has been tested by ELISA, Western blot analysis and Immunofluorescence

analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results. Recommended starting dilution for Western blot analysis is 1:1000 and Immunofluorescence is 1:250.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Recombinant human PKM2 (1-531aa) purified from E.coli.

**Formulation:** PBS, pH 7.4 containing 0.02% Sodium Azide and 10% Glycerol

State: Purified

State: Liquid purified Ig fraction

**Concentration:** lot specific

**Purification:** Protein-A affinity chromatography

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

Gene Name: pyruvate kinase, muscle

Database Link: Entrez Gene 5315 Human

P14618





Background:

PKM2 (pyruvate kinase M2), its association with phospho-tyrosine (pTyr) motifs, enables cells to use predominantly aerobic glycolysis instead of oxidative phosphorylation. Also PKM2 suggest that this change benefits cancer cells by enabling them to redirect glycolytic metabolites away from oxidation and energy production and, instead, toward anabolic processes and biosynthesis. PKM2-mediated generation of the aerobic glycolytic phenotype, although wasteful in terms of glucose consumption and waste generation, could provide a variety of advantages for cancerous cells. In addition nuclear translocation of the tumor marker pyruvate kinase M2 induces programmed cell death.

Synonyms: PK2, PK3, PKM, CTHBP, M2-PK, THBP1, OIP3, OIP-3, Pyruvate kinase 2/3, Pyruvate kinase

M1/M2, Pyruvate kinase muscle

**Protein Families:** Druggable Genome

Protein Pathways: Glycolysis / Gluconeogenesis, Metabolic pathways, Purine metabolism, Pyruvate metabolism,

Type II diabetes mellitus

## **Product images:**

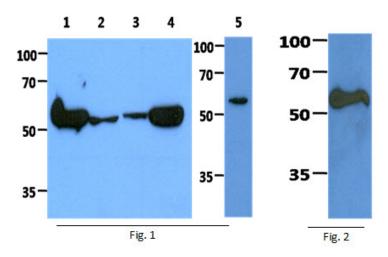


Fig.1: The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human PKM2 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1: HeLa cell lysate Lane 2: Jurkat cell lysate Lane 3: MCF7 cell lysate Lane 4: A549 cell lysate Lane 5: 293T cell lysate Fig 2: The Recombinant human PKM2 (50ng) protein was resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human PKM2 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.