# Anti-PKM2 Antibody

## ER1901-90

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|---|---|
| **Product Type:** | Rabbit polyclonal IgG, primary antibodies |
| **Species reactivity:** | Human, Mouse |
| **Applications:** | WB, FC |
| **Molecular Wt:** | Predicted band size: 58 kDa |

**Description:** This gene encodes a protein involved in glycolysis. The encoded protein is a pyruvate kinase that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate to ADP, generating ATP and pyruvate. This protein has been shown to interact with thyroid hormone and may mediate cellular metabolic effects induced by thyroid hormones. This protein has been found to bind Opa protein, a bacterial outer membrane protein involved in gonococcal adherence to and invasion of human cells, suggesting a role of this protein in bacterial pathogenesis. Several alternatively spliced transcript variants encoding a few distinct isoforms have been reported.

**Immunogen:** Synthetic peptide within human PKM aa 380-450.

**Positive control:** SiHa cell lysate, mouse spleen tissue lysate, MDA-MB-231 whole cell lysate, F9.

**Subcellular location:** Nucleus, cytoplasm.

**Database links:** SwissProt: P14618 Human | P52480 Mouse

**Recommended Dilutions:**

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|---|---|
| **WB** | 1:500-1:2,000 |
| **FC** | 1:50-1:100 |

**Storage Buffer:** 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

**Purity:** Immunogen affinity purified.

## Images

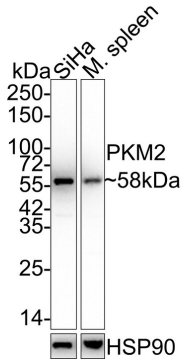


**Fig1:** Western blot analysis of PKM2 on different lysates with Rabbit anti-PKM2 antibody (ER1901-90) at 1/1,000 dilution.

Lane 1: SiHa cell lysate (15 µg/Lane)
Lane 2: Mouse spleen tissue lysate (30 µg/Lane)

Predicted band size: 58 kDa
Observed band size: 58 kDa

Exposure time: 8 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ER1901-90) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

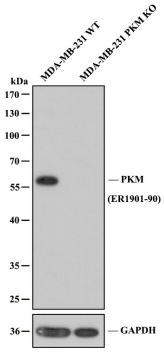


**Fig2:** All lanes: Western blot analysis of PKM with anti-PKM antibody (ER1901-90) at 1:500 dilution.

Lane 1: Wild-type MDA-MB-231 whole cell lysate.
Lane 2: PKM knockout MDA-MB-231 whole cell lysate.

ER1901-90 was shown to specifically react with PKM in wild-type MDA-MB-231 cells. No band was observed when PKM knockout samples were tested. Wild-type and PKM knockout samples were subjected to SDS-PAGE. Proteins were transferred to a PVDF membrane and blocked with 5% NFDM in TBST for 1 hour at room temperature. The primary Anti-PKM antibody (ER1901-90, 1/500) and Anti-GAPDH antibody (ET1601-4, 1/10000) were used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG H&L (HRP) Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.

Cell lysate was provided by Ubigene Biosciences (Ubigene Biosciences Co., Ltd., Guangzhou, China).

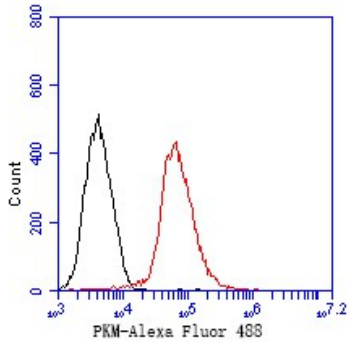


**Fig3:** Flow cytometric analysis of PKM2 was done on F9 cells. The cells were fixed, permeabilized and stained with the primary antibody (ER1901-90, 1/50) (red). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor 488-conjugated Goat anti-Rabbit IgG Secondary antibody at 1/1000 dilution for 30 minutes.Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

## Background References

1. Kuranaga Y. et. al. SRSF3, a Splicer of the PKM Gene, Regulates Cell Growth and Maintenance of Cancer-Specific Energy Metabolism in Colon Cancer Cells. Int J Mol Sci. 2018 Oct 2;19(10).
2. Naseem M. et. al. PKM-ζ Expression Is Important in Consolidation of Memory in Prelimbic Cortex Formed by the Process of Behavioral Tagging. Neuroscience. 2019 Jul 1;410:305-315.