

## PKM1 Antibody

Catalog No: #21577



Package Size: #21577-1 50ul #21577-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

## Description

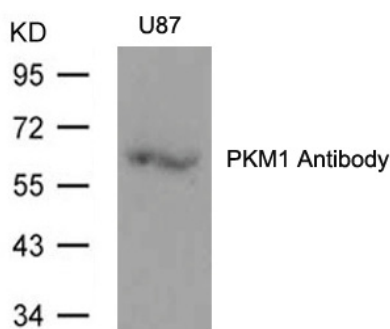
Product Name	PKM1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB IF
Species Reactivity	Hu Ms
Specificity	The antibody detects endogenous levels of total PKM1 protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa. 399~403(V-R-A-S-S) derived from Human PKM1.
Target Name	PKM1
Other Names	PKM; PK3; OIP3; PK2;
Accession No.	Swiss-Prot: P14618NCBI Protein: NP_872270.1
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

## Application Details

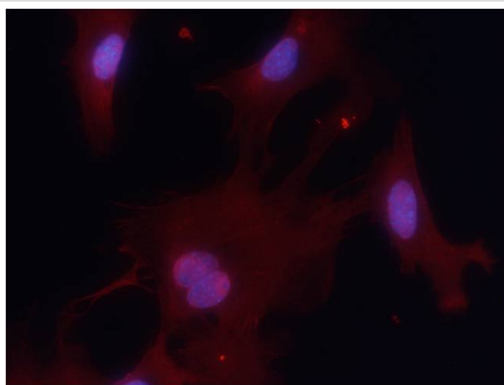
Predicted MW: 60kd

Western blotting: 1:1000

## Images



Western blot analysis of extracts from U87 cells using PKM1 Antibody #21577.



Immunofluorescence staining of methanol-fixed MEF cells using PKM1 Antibody #21577.

## Background

Glycolytic enzyme that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP. Stimulates POU5F1-mediated transcriptional activation. Plays a general role in caspase independent cell death of tumor cells. 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. The transition between the 2 forms contributes to the control of glycolysis and is important for tumor cell proliferation and survival.

Christofk, H.R. et al. (2008) Nature 452, 230-3.

Mazurek, S. et al. (2005) Semin Cancer Biol 15, 300-8.

Dombrackas, J.D. et al. (2005) Biochemistry 44, 9417-29.

Hitosugi, T. et al. (2009) Sci Signal 2, ra73.

## Published Papers

el at., Pyruvate Dehydrogenase A1 Phosphorylated by Insulin Associates with Pyruvate Kinase M2 and Induces LINC00273 through Histone Acetylation. In Biomedicines on 2022 May 27 by Abu Jubayer Hossain, Rokibul Islam, et al..PMID:35740278, , (2022)

[PMID:35740278](#)

el at., Single-Cell FISH Analysis Reveals Distinct Shifts in PKM Isoform Populations during Drug Resistance Acquisition. In Biomolecules on 2022 Aug 6 by Seong Ho Kim, Ji Hun Wi, et al..PMID:36008976, , (2022)

[PMID:36008976](#)

el at., A novel miR-206/hnRNPA1/PKM2 axis reshapes the Warburg effect to suppress colon cancer growth. In Biochem Biophys Res Commun on 2020 Oct 22 by Rong Fu, Peng Yang, et al..PMID:32800545, , (2020)

[PMID:32800545](#)

el at., Phosphorylation of pyruvate kinase M2 and lactate dehydrogenase A by fibroblast growth factor receptor 1 in benign and malignant thyroid tissue. In BMC Cancer on 2015 Mar 18 by Paul Kachel , Bogusz Trojanowicz et al..PMID:25880801, , (2015)

[PMID:25880801](#)

el at., Pyruvate kinase M2 accelerates pro-inflammatory cytokine secretion and cell proliferation induced by lipopolysaccharide in colorectal cancer. In Cell Signal on 2015 Jul by Peng Yang, Zongwei Li, et al..PMID:25778902, , (2015)

[PMID:25778902](#)

el at., Regulatory circuit of PKM2/NF- $\kappa$ B/miR-148a/152-modulated tumor angiogenesis and cancer progression. In Oncogene on 2015 Oct by Q Xu, L-Z Liu, et al..PMID:25703326, , (2015)

[PMID:25703326](#)

el at., PKM2 regulates chromosome segregation and mitosis progression of tumor cells. In Mol Cell on 2014 Jan 9 by Yuhui Jiang, Xinjian Li et al..PMID: 24316223, , (2014)

[PMID:24316223](#)

el at., PKM2 phosphorylates MLC2 and regulates cytokinesis of tumour cells. In Nat Commun on 2014 Nov 21 by Yuhui Jiang , Yugang Wang et

al..PMID: 25412762, , (2014)

[PMID:25412762](#)

---

el at., Pyruvate kinase M2 facilitates colon cancer cell migration via the modulation of STAT3 signalling. In Cell Signal on 2014 Sep by Peng Yang, Zongwei Li et al..PMID:24686087, , (2014)

[PMID:24686087](#)

---

el at., EGFR-induced and PKC $\theta$  monoubiquitylation-dependent NF- $\kappa$ B activation upregulates PKM2 expression and promotes tumorigenesis. In Mol Cell on 2012 Dec 14 by

Weiwei Yang, Yan Xia, et al..PMID: 23123196, , (2012)

[PMID:23123196](#)

---

el at., PKM2 Phosphorylates Histone H3 and Promotes Gene Transcription and Tumorigenesis. In Cell on 2012 Aug 17 by Weiwei Yang, Yan Xia, et al..PMID: 22901803, , (2012)

[PMID:22901803](#)

---

---

Note: This product is for in vitro research use only and is not intended for use in humans or animals.