

Mouse anti-Human PKM2 Monoclonal Antibody | anti-PKM antibody

Anti-PKM2 Antibody Picoband (monoclonal, 11I4C3)

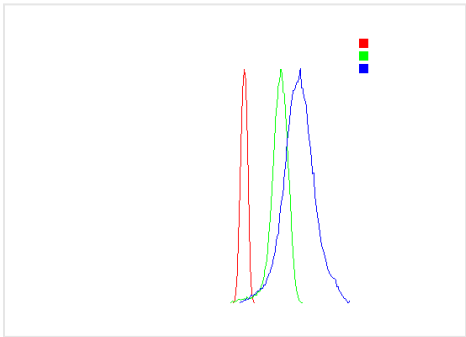
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126886	Mouse	Human	Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PKM2; Monoclonal Antibody; Anti-PKM2 Antibody Picoband (monoclonal; 11I4C3); anti-PKM antibody

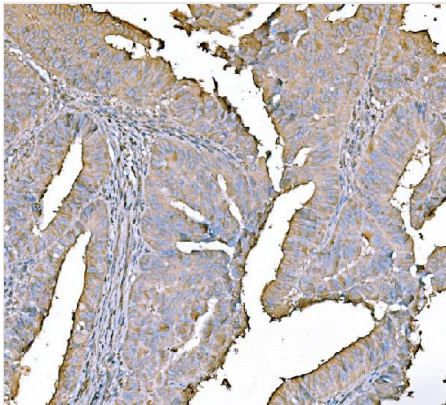
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG2b
Clone Number	11I4C3
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-PKM antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human PKM2(475-500aa KDPVQEAWAEDVDLRVNFAMNVGKAR), different from the related mouse sequence by five amino acids, and from the related rat sequence by four amino acids.
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



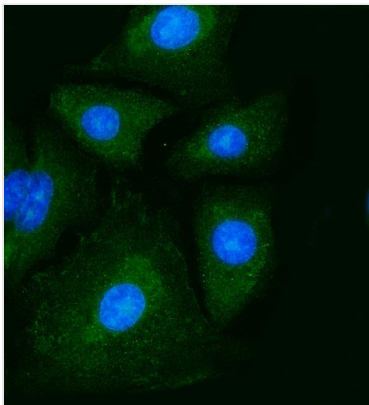
FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of HeLa cells using anti-PKM2 antibody (AAA126886).Overlay histogram showing HeLa cells stained with AAA126886 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-PKM2 Antibody (AAA126886, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-mouse IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



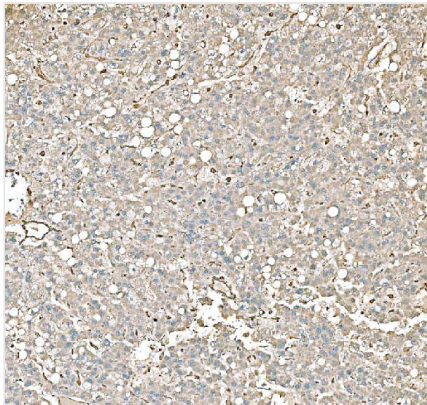
IHC (Immunohistochemisry)

Figure 3. IHC analysis of PKM2 using anti-PKM2 antibody (AAA126886).PKM2 was detected in a paraffin-embedded section of differentiated adenocarcinoma of the human rectum tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-PKM2 Antibody (AAA126886) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (#SA1021) with DAB as the chromogen.



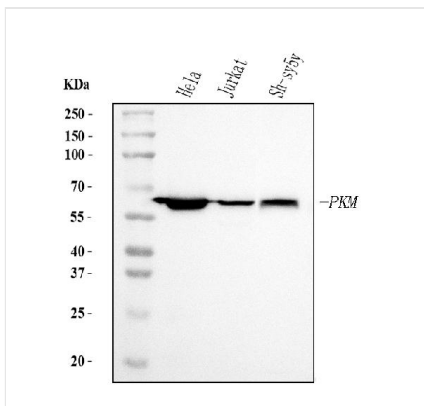
IF (Immunofluorescence)

Figure 4. IF analysis of PKM2 using anti-PKM2 antibody (AAA126886).PKM2 was detected in an immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL mouse anti-PKM2 Antibody (AAA126886) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Mouse IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohiostchemistry)

Figure 2. IHC analysis of PKM2 using anti-PKM2 antibody (AAA126886).PKM2 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-PKM2 Antibody (AAA126886) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (#SA1021) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of PKM2 using anti-PKM2 antibody (AAA126886). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human Jurkat whole cell lysates, Lane 3: human SH-SY5Y whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-PKM2 antigen affinity purified monoclonal antibody (#AAA126886) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PKM2 at approximately 60 kDa. The expected band size for PKM2 is at 60 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PKM antibody	PKM (Pyruvate Kinase, Muscle), also known as PK3 or PKM2, is an enzyme that in humans is encoded by the PKM gene. The activity of pyruvate kinase subtype M2 is increased by fructose 1, 6-bisphosphate (Fru-1, 6-P2). By in situ hybridization, Popescu and Cheng (1990) mapped the THBP1 gene to 15q24-q25. Ashizawa et al. (1991) manipulated the intracellular Fru-1, 6-P2 concentration in several mammalian cell lines, including human, by varying the glucose concentration in the media. Using a novel proteomic screen for phosphotyrosine-binding proteins, Christofk et al. (2008) observed that PKM2 binds directly and selectively to tyrosine-phosphorylated peptides.
Product Categories/Family for anti-PKM antibody	Primary Antibodies , Mouse Monoclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	332164775
NCBI GeneID	5315
NCBI Accession #	NP_001193725.1
NCBI GenBank Nucleotide #	NM_001206796.1
UniProt Accession #	P14618 ; P14786 ; Q53GK4 ; Q96E76 ; Q9BWB5 ; Q9UCV6 ; Q9UPF2 ; A6NFK3 ; B2R5N8 ; B3KRY0 ; B4DFX8 ; B4DUU6
Molecular Weight	531
NCBI Official Full Name	pyruvate kinase PKM isoform c
NCBI Official Synonym Full Names	pyruvate kinase, muscle
NCBI Official Symbol	PKM
NCBI Official Synonym Symbols	PK3; TCB; OIP3; PKM2; CTHBP; THBP1
NCBI Protein Information	pyruvate kinase PKM; p58; OIP-3; tumor M2-PK; PK, muscle type; pyruvate kinase 2/3; OPA-interacting protein 3; pyruvate kinase isozymes M1/M2; pyruvate kinase muscle isozyme; thyroid hormone-binding protein 1; cytosolic thyroid hormone-binding protein; th

UniProt Protein Name	Pyruvate kinase PKM
UniProt Gene Name	PKM
UniProt Synonym Gene Names	OIP3; PK2; PK3; PKM2; CTHBP; OIP-3; THBP1
UniProt Entry Name	KPYM_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/pkm2-antibody-clone-11i4c3-flow-cytometry-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/126886>