

ARG57138 anti-PKM2 antibody [1B10]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [1B10] recognizes PKM2
Tested Reactivity	Hu
Tested Application	ICC/IF, WB
Host	Mouse
Clonality	Monoclonal
Clone	1B10
Isotype	IgG1, kappa
Target Name	PKM2
Species	Human
Immunogen	Recombinant fragment around aa. 1-531 of Human PKM2
Conjugation	Un-conjugated
Alternate Names	PK3; PKM2; OIP3; Pyruvate kinase muscle isozyme; CTHBP; HEL-S-30; THBP1; OIP-3; Pyruvate kinase 2/3; Tumor M2-PK; Cytosolic thyroid hormone-binding protein; EC 2.7.1.40; Opa-interacting protein 3; p58; TCB; Pyruvate kinase PKM; Thyroid hormone-binding protein 1

Application Instructions

Application table	Application	Dilution
	ICC/IF	Assay-dependent
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

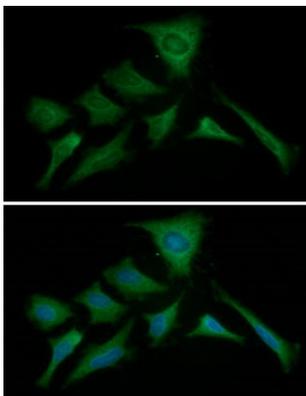
Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 5315 Human Swiss-port # P14618 Human
Gene Symbol	PKM
Gene Full Name	pyruvate kinase, muscle
Background	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. [provided by RefSeq, May 2011]
Function	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. [UniProt]
Highlight	Related products: PKM2 antibodies; PKM2 Duos / Panels; Anti-Mouse IgG secondary antibodies; Related news: Vascular development is regulated by FGF-dependent metabolic control
Research Area	Cancer antibody; Gene Regulation antibody; Metabolism antibody; Signaling Transduction antibody; Colorectal Carcinoma Marker antibody
Calculated Mw	58 kDa
PTM	ISGylated. Under hypoxia, hydroxylated by EGLN3. Acetylation at Lys-305 is stimulated by high glucose concentration, it decreases enzyme activity and promotes its lysosomal-dependent degradation via chaperone-mediated autophagy. FGFR1-dependent tyrosine phosphorylation is reduced by interaction with TRIM35.

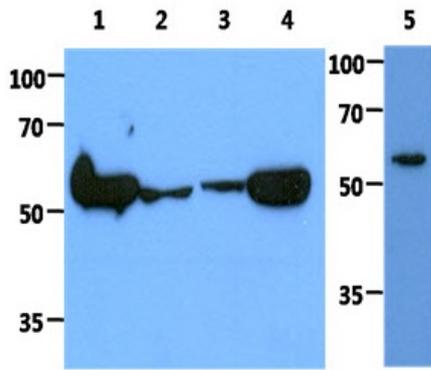
Images



ARG57138 anti-PKM2 antibody [1B10] ICC/IF image

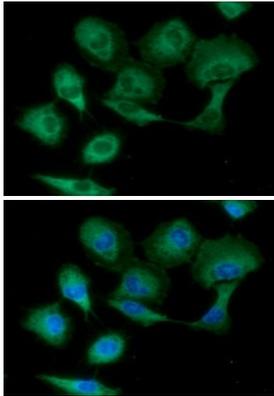
Immunofluorescence: HeLa cells line stained with ARG57138 anti-PKM2 antibody [1B10] at 1:100 (Green).

DAPI (Blue) for nucleus staining.



ARG57138 anti-PKM2 antibody [1B10] WB image

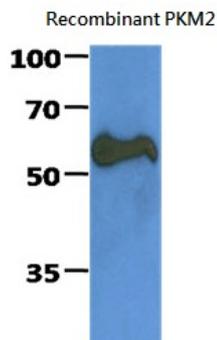
Western blot: 40 μ g of 1) HeLa, 2) Jurkat, 3) MCF7, 4) A549, and 5) 293T cell lysates stained with ARG57138 anti-PKM2 antibody [1B10] at 1:1000.



ARG57138 anti-PKM2 antibody [1B10] ICC/IF image

Immunofluorescence: A549 cells line stained with ARG57138 anti-PKM2 antibody [1B10] at 1:100 (Green).

DAPI (Blue) for nucleus staining.



ARG57138 anti-PKM2 antibody [1B10] WB image

Western blot: 50 ng of Recombinant Human PKM2 protein stained with ARG57138 anti-PKM2 antibody [1B10] at 1:1000.