

ARG43328 anti-PKM1/2 phospho (Tyr105) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PKM1/2 phospho (Tyr105)
Tested Reactivity	Hu, Ms, Rat
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PKM1/2
Species	Human
Immunogen	Phosphospecific peptide around Tyr105 of Human PKM.
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
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	NIH/3T3	
Observed Size	~ 62 kDa	

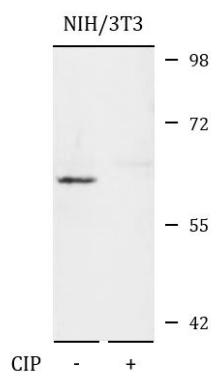
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
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

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 (PubMed:17308100, PubMed:18191611, PubMed:21620138). Promotes in a STAT1-dependent manner, the expression of the immune checkpoint protein CD274 in ARNTL/BMAL1-deficient macrophages (By similarity). [UniProt]
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. [UniProt]
Cellular Localization	Cytoplasm. Nucleus. Note=Translocates to the nucleus in response to different apoptotic stimuli. Nuclear translocation is sufficient to induce cell death that is caspase independent, isoform-specific and independent of its enzymatic activity. [UniProt]

Images



ARG43328 anti-PKM1/2 phospho (Tyr105) antibody WB image

Western blot: NIH/3T3 cells were untreated (left) or treated by CIP (20 μ l / 400 μ l) at 37°C for 1 hour (right). 25 μ g of cell lysate stained with ARG43328 anti-PKM1/2 phospho (Tyr105) antibody at 1:1000 dilution.