

Rabbit PKM2 Polyclonal Antibody | anti-PKM antibody

PKM2 (N-term E131) Antibody

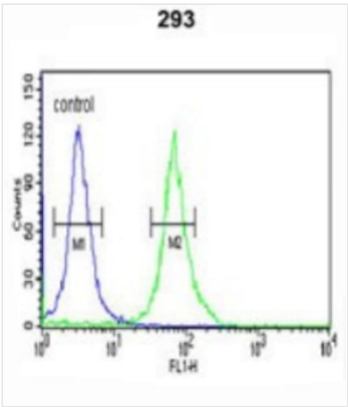
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA289922	Rabbit	Human (Predicted Reactivity: Mouse, Rabbit, Rat)	Flow Cytometry, Functional Assay, Immunohistochemistry, ELISA, Western Blot

PRODUCT SYNONYMS

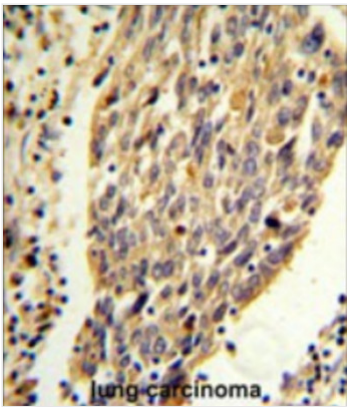
PKM2; Polyclonal Antibody; PKM2 (N-term E131) Antibody; Pyruvate kinase PKM; Cytosolic thyroid hormone-binding protein; CTHBP; Opa-interacting protein 3; OIP-3; Pyruvate kinase 2/3; Pyruvate kinase muscle isozyme; Thyroid hormone-binding protein 1; THBP1; Tumor M2-PK; p58; PKM; OIP3; PK2; PK3; anti-PKM antibody

PRODUCT SPECIFICATIONS

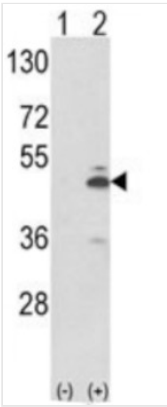
Host	Rabbit
Reactivity	Human (Predicted Reactivity: Mouse, Rabbit, Rat)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	This PKM2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 116-145 amino acids from the N-terminal region of human PKM2.
Purity/Purification	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Sequence Positions	116-145
Sequence Length	516
Applicable Applications for anti-PKM antibody	FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Function	Catalyzes the final rate-limiting step of glycolysis by mediating the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP (PubMed:15996096, PubMed:1854723, PubMed:20847263). 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 (PubMed:15996096, PubMed:1854723, PubMed:20847263). The transition between the 2 forms contributes to the control of glycolysis and is important for tumor cell proliferation and survival (PubMed:15996096, PubMed:1854723, PubMed:20847263).
Cellular Location	[Isoform M2]: Cytoplasm. Nucleus Note=Translocates to the nucleus in response to various signals, such as EGF receptor activation or apoptotic stimuli (PubMed:17308100, PubMed:22056988, PubMed:24120661). Nuclear translocation is promoted by acetylation by EP300 (PubMed:24120661). Deacetylation by SIRT6 promotes its nuclear export in a process dependent of XPO4, thereby suppressing its ability to activate transcription and promote tumorigenesis (PubMed:26787900).
Tissue Location	[Isoform M2]: Specifically expressed in proliferating cells, such as embryonic stem cells, embryonic carcinoma cells, as well as cancer cells.
Preparation and Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles



FCM/FACS (Flow Cytometry)
PKM2 (N-term E131) Antibody flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



IHC (Immunohistochemistry)
PKM2 (N-term E131) Antibody IHC analysis in formalin fixed and paraffin embedded human lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the PKM2 (N-term E131) Antibody for immunohistochemistry. Clinical relevance has not been evaluated.



WB (Western Blot)
Western blot analysis of PKM2 (arrow) using rabbit polyclonal PKM2 Antibody (N-term E131). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PKM2 gene (Lane 2).

ADDITIONAL INFORMATION

Related Product Information for anti-PKM antibody	PKM2 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.
Product Categories/Family for anti-PKM antibody	Cancer; Cardiovascular; Metabolism; Signal transduction
References	Clower,C.V., et.al., Proc. Natl. Acad. Sci. U.S.A. 107 (5), 1894-1899 (2010) David,C.J., et.al., Nature 463 (7279), 364-368 (2010)

NCBI AND UNIPROT INFORMATION

NCBI GI #	332164775
NCBI GeneID	5315
NCBI Accession #	NP_001193725.1; NP_001193726.1; NP_001193727.1; NP_001193728.1; NP_002645.3; NP_872270.1; NP_872271.1
NCBI GenBank Nucleotide #	NM_001206796.1

UniProt Accession #	P14618 ; P14786 ; Q53GK4 ; Q96E76 ; Q9BWB5 ; Q9UCV6 ; Q9UPF2 ; A6NFK3 ; B2R5N8 ; B3KRY0 ; B4DFX8 ; B4DUU6
Molecular Weight	57937
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; HEL-S-30
NCBI Protein Information	pyruvate kinase PKM
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/polyclonal/pkm2-antibody-flow-cytometry-immunohistochemistry-western-blot-elisa/289922>