

## Summary

<b>Production Name</b>	PKM2 Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	IF-P,IF-F,ICC/IF,WB,IHC-P,ELISA
<b>Reactivity</b>	Human,Mouse,Rat

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	PKM PKM; OIP3; PK2; PK3; PKM2; Pyruvate kinase isozymes M1/M2; 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; Tu
<b>Alternative Names</b>	
<b>Gene ID</b>	5315.0
<b>SwissProt ID</b>	P14618.The antiserum was produced against synthesized peptide derived from human PKM2. AA range:181-230

## Application

<b>Dilution Ratio</b>	IF-P/IF-F/ICC/IF 1:50-200, WB 1:500-2000, ELISA 1:10000-20000, IHC-P 1:50-300
<b>Molecular Weight</b>	58kDa

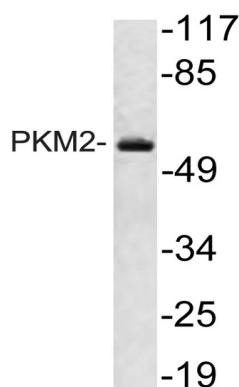
## Background

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], catalytic activity: ATP + pyruvate = ADP + phosphoenolpyruvate, cofactor: Divalent metal cations, cofactor: Magnesium, cofactor: Potassium, enzyme regulation: Isoform M2 is allosterically activated by D-fructose 1,6-bisphosphate (FBP). Inhibited by oxalate and 3,3',5-triiodo-L-thyronine (T3), function: Glycolytic enzyme that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP, miscellaneous: There are 4 isozymes of pyruvate kinase in mammals: L, R, M1 and M2. L type is major isozyme in the liver, R is found in red cells, M1 is the main form in muscle, heart and brain, and M2 is found in early fetal tissues as well as in most cancer cells, online information: Pyruvate kinase entry, pathway: Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 5/5, PTM: Phosphorylated upon DNA damage, probably by ATM or ATR, similarity: Belongs to the pyruvate kinase family, subunit: Monomer and homotetramer. Exists as a monomer in the absence of FBP, and reversibly associates to form a homotetramer in the presence of FBP. The monomeric form binds T3. Tetramer formation induces pyruvate kinase activity. Interacts with HERC1,

## Research Area

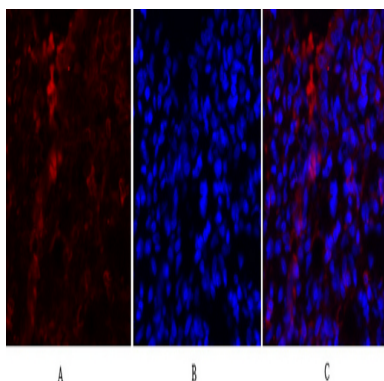
Glycolysis / Gluconeogenesis; Purine metabolism; Pyruvate metabolism; Type II diabetes mellitus;

## Image Data



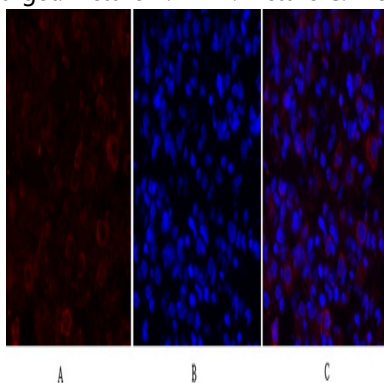
Western blot analysis of lysate from HT29 cells, using PKM2 antibody.

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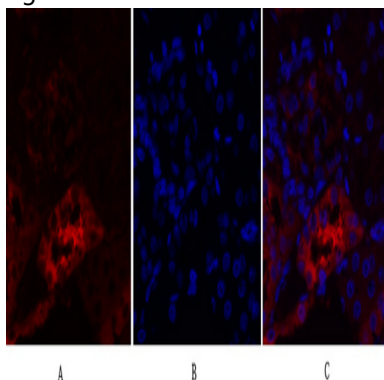
Immunofluorescence analysis of rat-lung tissue. 1,PKM2 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) .  
2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min.

Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



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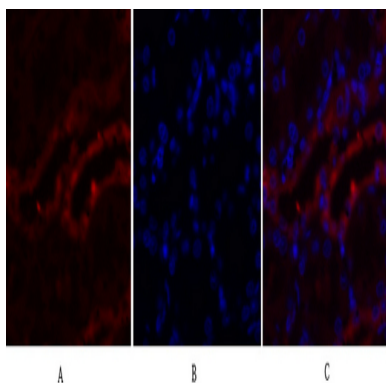
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Immunofluorescence analysis of rat-kidney tissue. 1,PKM2 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) .  
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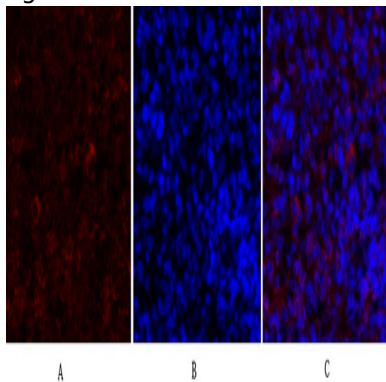
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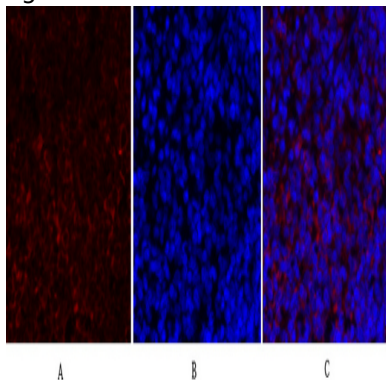
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Immunofluorescence analysis of rat-spleen tissue. 1,PKM2 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) .  
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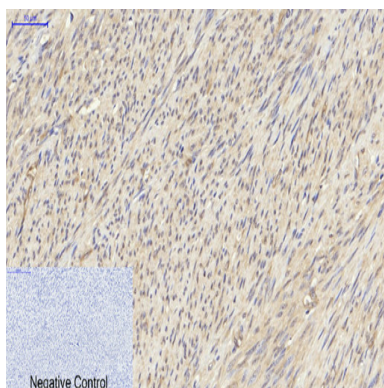
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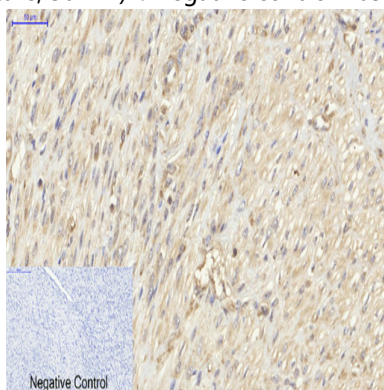
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Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,PKM2 Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1,PKM2 Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.

## **Note**

For research use only.