



www.antageneinc.com

PKM (ANT0080R) Rabbit mAb

CatalogNo: ANT8043 Recombinant R

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA Quantity : 100 ug/vial

| Host Species Rabbit | • Human, Mouse, Rat, | Reactivity WB,IHC,IF,IP,ELISA | Applications |
|---|----------------------|---|--------------|
| MW • 57kD (Calc 57kD (Obser | | Isotype | |

Recommended Dilution Ratios

IHC 1:200-1000 WB 1:1000-5000 IF 1:200-1000 ELISA 1:5000-20000 IP 1:50-200

Storage

 Storage*
 -15°C to -25°C/1 year(Do not lower than -25°C)

 Basic Information

 Clonality
 Monoclonal

 Clone Number
 ANT0080R

Immunogen Information Specificity

Endogenous

Gene name PKM

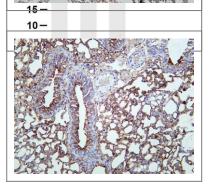
| Gene name | PKIVI | | | | |
|--|--|----------------|-----------------|--|--|
| Protein Name | Pyruvate kinase isozymes M1/M2 | | | | |
| | Organism | Gene ID | UniProt ID | | |
| | Human | <u>5315</u> ; | <u>P14618</u> ; | | |
| | Mouse | <u>18746</u> ; | <u>P52480;</u> | | |
| | Rat | <u>25630</u> ; | <u>P11980</u> ; | | |
| Cellular Localization | Cytoplasm | | | | |
| Tissue specificity [Isoform M2]: Specifically expressed in proliferating cells, such as embryonic stem cells, embryonic carcinoma cells, as well as cancer cells. ; [Isoform M1]: Expressed in adult tissues (PubMed:18337823). Not expressed in tumor cells (PubMed:18337823). | | | | | |
| Function | 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-biphosphate (FBP). Inhibited by oxalate and 3,3',5triiodo-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.,ANTM: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., | | | | |

Validation Data

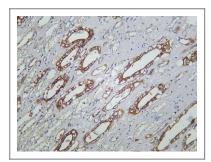
kDa

Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PKM (ANTO080R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A549 Lane 2: NIH3T3 Lane 3: C6 Predicted band size:

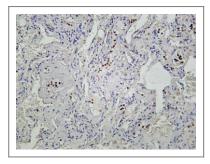
57kDa Observed band size: 57kDa Rat lung was stained with Anti-PKM (ANT0080R) rabbit antibody



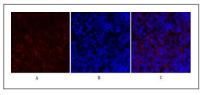
Mouse lung was stained with Anti-PKM (ANT0080R) rabbit antibody



Human kidney was stained with Anti-PKM (ANT0080R) rabbit antibody



Human lung was stained with Anti-PKM (ANT0080R) rabbit antibody



Immunofluorescence analysis of rat-spleen 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