

Anti-PYRUVATE KINASE (Rabbit Muscle) (GOAT) Antibody

Pyruvate Kinase Antibody Catalog # ASR4081

Specification

Anti-PYRUVATE KINASE (Rabbit Muscle) (GOAT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Goat Unconjugated Rabbit Rabbit Polyclonal WB, IHC, E, I, LCI This affinity purified antibody has been tested in western blot. This antibody is suitable for use in ELISA and immunohistochemistry. Specific conditions for reactivity should be optimized by the end user.
Physical State Buffer	Lyophilized 0.02 M Potassium Phosphate, 0.15 M
buildi	Sodium Chloride, pH 7.2
Immunogen	Pyruvate Kinase (Rabbit Muscle)
Reconstitution Volume	100 μL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Preservative	0.01% (w/v) Sodium Azide

Anti-PYRUVATE KINASE (Rabbit Muscle) (GOAT) Antibody - Additional Information

Gene ID 100008676

Other Names 100008676

Purity

Anti-Pyruvate Kinase is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum as well as purified and partially purified Pyruvate Kinase (Rabbit Muscle). This product has been reported to react with all forms of pyruvate kinase (pan M-PK). Cross-reactivity against pyruvate kinase from other mammalian tissues is expected but has not been specifically determined.

Storage Condition

Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note



This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-PYRUVATE KINASE (Rabbit Muscle) (GOAT) Antibody - Protein Information

Name PKM

Function

Catalyzes the final rate-limiting step of glycolysis by mediating the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP. 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.

Cellular Location

[Isoform M2]: Cytoplasm {ECO:0000250|UniProtKB:P14618}. Nucleus {ECO:0000250|UniProtKB:P14618} Note=Translocates to the nucleus in response to various signals, such as EGF receptor activation or apoptotic stimuli {ECO:0000250|UniProtKB:P14618}

Anti-PYRUVATE KINASE (Rabbit Muscle) (GOAT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-PYRUVATE KINASE (Rabbit Muscle) (GOAT) Antibody - Images

Anti-PYRUVATE KINASE (Rabbit Muscle) (GOAT) Antibody - Background

Pyruvate kinase (PKM) is a glycolytic enzyme that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP. It stimulates POU5F1-mediated transcriptional activation. There are 4 isozymes of pyruvate kinase in mammals (L, R, M1, M2) encoded by 2 different genes: PKLR and PKM. The L and R isozymes are generated from the PKLR by differential splicing of RNA; the M1 and M2 forms are produced from the PKM gene by differential splicing. 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. This protein is involved in step 5 of the subpathway that synthesizes pyruvate from D-glyceraldehyde 3-phosphate. Anti-Pyruvate Kinase (Rabbit Muscle) Antibody is ideal for investigators in Cancer, Cell Biology, and Neuroscience.