

## Datasheet for 100-1178

## Pyruvate Kinase Antibody

### Overview

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|----------------------|---|
| <b>Description:</b>  | Anti-Pyruvate Kinase (Rabbit Muscle) (GOAT) Antibody - 100-1178 |
| <b>Item No.:</b>     | 100-1178  |
| <b>Size:</b>         | 2 mL  |
| <b>Reactivity:</b>   | Rabbit  |
| <b>Host Species:</b> | Goat  |

### Product Details

|                      |   |
|----------------------|---|
| <b>Background:</b>   | Pyruvate kinase (EC: 2.7.1.40) is an enzyme involved in glycolysis. It catalyzes the transfer of a phosphate group from phosphoenolpyruvate (PEP) to ADP, yielding one molecule of pyruvate and one molecule of ATP. This process also requires a magnesium ion. The enzyme is a 'transferase' under the international classification of enzymes. This step is the final one in the glycolytic pathway, which produces pyruvate molecules, the final product of aerobic glycolysis. However, in anaerobic glycolysis, lactate dehydrogenase will utilize the NADH produced by glyceraldehyde phosphate dehydrogenase to reduce pyruvate to lactate. In humans, there are two pyruvate kinase isozymes: type M (muscle, SwissProt P14618) and type L,R (liver and erythrocyte, SwissProt P30613). The isozymes differ in primary structure and regulation. This reaction has a large positive free energy change, one of three in glycolysis. All three such steps regulate the overall activity of the pathway, and are, in general, irreversible under wild-type conditions. Anti-Pyruvate kinase antibody is idea for investigators involved in cytokines and growth factor research. |
| <b>Synonyms:</b>     | goat anti-Pyruvate Kinase Antibody, Pyruvate kinase isozymes M1/M2 antibody, Pyruvate kinase muscle isozyme antibody, Pyruvate kinase 2/3 antibody, Cytosolic thyroid hormone-binding protein antibody, PKM2  |
| <b>Host Species:</b> | Goat  |
| <b>Clonality:</b>    | Polyclonal  |
| <b>Format:</b>       | Antiserum   |

### Target Details

|                   |     |
|-------------------|-----|
| <b>Gene Name:</b> | PKM |
|-------------------|-----|

|                            |  |
|----------------------------|--|
| <b>Reactivity:</b>         | Rabbit   |
| <b>Immunogen Type:</b>     | Native Protein   |
| <b>Immunogen:</b>          | Pyruvate Kinase [Rabbit Muscle]  |
| <b>Purity/Specificity:</b> | Anti-PYRUVATE KINASE Antibody immunoelectrophoresis resulted in a single precipitin arc against anti-goat serum, 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 tissues and species may occur but have not been specifically determined. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">NCBI - NP_001182574.1</a></li><li>• <a href="#">UniProtKB - P11974</a></li><li>• <a href="#">GeneID - 100008676</a></li></ul>  |

## Application Details

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| <b>Application Note:</b> | Anti-PYRUVATE KINASE Antibody is suitable for immunoblotting (western or dot blot), ELISA, immunoprecipitation, conjugation and most immunological methods requiring high titer and specificity. Specific conditions should be optimized by user. |
| <b>Assay Dilutions:</b>  | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.   |
| <b>ELISA:</b>            | 1:50,000 - 1:200,000  |
| <b>IHC:</b>              | User Optimized  |
| <b>IP:</b>               | User Optimized  |
| <b>WB:</b>               | 1:5,000 - 1:20,000  |

## Formulation

|                               |  |
|-------------------------------|--|
| <b>Physical State:</b>        | Lyophilized  |
| <b>Concentration:</b>         | 40 mg/mL by Refractometry                                  |
| <b>Buffer:</b>                | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>          | 0.01% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>            | None   |
| <b>Reconstitution Volume:</b> | 2.0 mL   |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)               |

## Shipping & Handling

**Shipping Condition:** Ambient

**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.

**Expiration:** Expiration date is one (1) year from date of receipt.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.