



## **Human PKM peptide (DAG-P1029)**

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

## PRODUCT INFORMATION

| Antigen Description   | 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] |
|-----------------------|---|
| Specificity           | Specifically expressed in proliferating cells, such as embryonic stem cells, embryonic carcinoma cells, as well as cancer cells.  |
| Purity                | 70 - 90% by HPLC.   |
| Conjugate             | Unconjugated  |
| Sequence Similarities | Belongs to the pyruvate kinase family.  |
| Format                | Liquid  |
| Preservative          | None  |
| Storage               | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.   |

## **GENE INFORMATION**

| Gene Name       | PKM pyruvate kinase, muscle [ Homo sapiens (human) ] |
|-----------------|--|
| Official Symbol | PKM  |

45-1 Ramsey Road, Shirley, NY 11967, USA

Email: info@creative-diagnostics.com

Tel: 1-631-624-4882 Fax: 1-631-938-8221

| Synonyms            | PKM; pyruvate kinase, muscle; PK3; TCB; OIP3; PKM2; CTHBP; THBP1; HEL-S-30; pyruvate kinase PKM; p58; OIP-3; tumor M2-PK; PK, muscle type; pyruvate kinase 2/3; OPA-interacting protein 3; pyruvate kinase isozymes M1/M2; pyruvate kinase muscle isozyme; thyroid hormone-binding protein 1; epididymis secretory protein Li 30; cytosolic thyroid hormone-binding protein; thyroid hormone-binding protein, cytosolic;   |
|---------------------|--|
| Entrez Gene ID      | <u>5315</u>  |
| mRNA Refseq         | NM_001206796.1   |
| Protein Refseq      | NP_001193725.1   |
| UniProt ID          | P14618   |
| Chromosome Location | 15q22  |
| Pathway             | Adenine ribonucleotide biosynthesis, IMP => ADP,ATP, organism-specific biosystem; Adenine ribonucleotide biosynthesis, IMP => ADP,ATP, conserved biosystem; Biosynthesis of amino acids, organism-specific biosystem; Biosynthesis of amino acids, conserved biosystem; Carbon metabolism, organism-specific biosystem; Carbon metabolism, conserved biosystem; Glucose metabolism, organism-specific biosystem; Glycolysis, organism-specific biosystem; Glycolysis (Embden-Meyerhof pathway), glucose => pyruvate, |
| Function            | ATP binding; MHC class II protein complex binding; magnesium ion binding; poly(A) RNA binding; potassium ion binding; protein binding; pyruvate kinase activity;   |