

## Recombinant Human PKM2, His-tagged

Cat. No. PKM2-1515H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant human PKM2 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography (1-531 aa).
<b>Species</b>	Human
<b>Source</b>	Human
<b>Description</b>	PKM2 is an isoenzyme of the glycolytic enzyme pyruvate kinase. This protein catalyzes the production of pyruvate and ATP from phosphoenolpyruvate. PKM2 interacting with Opa proteins, a bacterial outer membrane protein involved in gonococcal adherence to and invasion of human cells, is required for bacterial pathogenesis.
<b>Form</b>	Liquid. In 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol
<b>Molecular Weight</b>	60.1 kDa (551aa)
<b>Purity</b>	> 95% by SDS - PAGE
<b>Concentration</b>	1 mg/ml (determined by Bradford assay)
<b>Biological activity</b>	Specific activity: > 5.0 unit/mg. One unit will form 1.0 umol of phospho(enol)pyruvate to pyruvate per minute at pH 7.5 at 37°C.
<b>Activity Assay</b>	1. Prepare a 1.45 ml reaction mixture into a suitable container. - Reaction mixture:

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100mM Tris-HCl pH 7.5, 7.6 mM ADP, 15 mM MgCl<sub>2</sub>, 74 mM KCl, 0.2 mM Beta-NADH, 5.2 mM PEP, 0.025 units Recombinant LDHA protein. 2. Add 50ul of recombinant PKM2 protein solution with various concentrations (0.5ug, 1ug) 3. Read the decrease in A340nm in kinetic mode for 10 minutes.

**Sequences of amino acids**

MGSSHHHHHH SSSLVPRGSH MSKPHSEAGT AFIQTQQLHA AMADTFLEHM  
 CRLDIDSPPI TARNTGIICT IGPASRSVET LKEMIKSGMN VARLNFSHGT  
 HEYHAETIKN VRTATESFAS DPILYRPVAV ALDTKGPEIR TGLIKGSGTA  
 EVELKKGATL KITLDNAYME KCDENILWLD YKNICKVVEV GSKIYVDDGL  
 ISLQVKQKGA DFLVTEVENG GSLGSKKGVN LPGAAVDLPA VSEKDIQDLK  
 FGVEQDVDMV FASFIRKASD VHEVRKVLGE KGKNIKIISK IENHEGVRRF  
 DEILEASDGI MVARGDLGIE IPAEEKVFLAQ KMMIGRCNRA GKPVICATQM  
 LESMIKKPRP TRAEKSDVAN AVLDGADCIM LSGETAKGDY PLEAVRMQHL  
 IAREAEAAIY HLQLFEELRR LAPITSDPTE ATAVGAVEAS FKCCSGAIIV  
 LTKSGRSAHQ VARYRPRAPI IAVTRNPQTA RQAHLYRGIF PVLCKDPVQE  
 AWAEDVDLRV NFAMNVGKAR GFFKKGDVVI VLTGWRPGSG FTNTMRVVPV P

**Storage**

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

**Pathways**

Biosynthesis of alkaloids derived from histidine and purine; Biosynthesis of alkaloids derived from ornithine, lysine and nicotinic; Biosynthesis of alkaloids derived from shikimate pathway; Biosynthesis of alkaloids derived from terpenoid and polyketide

## GENE INFORMATION

**Gene Name** PKM2 pyruvate kinase, muscle [ Homo sapiens ]

**Official Symbol** PKM2

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**Synonyms** PKM2; pyruvate kinase, muscle; PK3; PKM; TCB; OIP3; CTHBP; THBP1; MGC3932; Pyruvate kinase isozymes M1/M2; EC 2.7.1.40; Pyruvate kinase muscle isozyme; Pyruvate kinase 2/3; Cytosolic thyroid hormone-binding protein; Cytosolic thyroid hormone-binding protein; OPA-interacting protein 3; PK, muscle type; pyruvate kinase, muscle; thyroid hormone-binding protein, cytosolic

**Gene ID** [5315](#)

**mRNA Refseq** [NM\\_002654](#)

**Protein Refseq** [NP\\_002645](#)

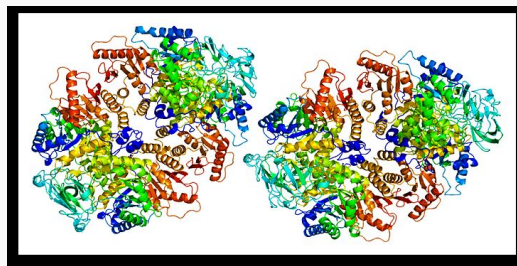
**MIM** [179050](#)

**UniProt ID** [P14618](#)

**Chromosome Location** [15q22](#)

**Function** ATP binding; magnesium ion binding; nucleotide binding; potassium ion binding; protein binding; pyruvate kinase activity; transferase activity

**PDB rendering based on 1a49.**



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