

## Product datasheet

# Recombinant human PKM2 protein (Active) ab89364

★★★★★ [1 Abreviews](#) [2 References](#) [2 Images](#)

### Description

<b>Product name</b>	Recombinant human PKM2 protein (Active)	
<b>Biological activity</b>	Specific activity: > 25,000 pmol/min/ug. One unit will convert 1.0 pmole of phospho(enol)pyruvate to pyruvate per minute at pH 7.5 at 37C.	
<b>Purity</b>	> 95 % SDS-PAGE. ab89364 is purified using conventional chromatography techniques.	
<b>Endotoxin level</b>	< 1.000 Eu/μg	
<b>Expression system</b>	Escherichia coli	
<b>Accession</b>	<b><u>P14618-1</u></b>	
<b>Protein length</b>	Full length protein	
<b>Animal free</b>	No	
<b>Nature</b>	Recombinant	
<b>Species</b>	Human	
<b>Sequence</b>	<pre> MSKPHSEAGT AFIQTQQLHA AMADTFLEHM CRLDIDSPPI TARNTGICT IGPASRSVET LKEMIKSGMN VARLNFSHGT HEYHAETIKN VRTATESFAS DPILYRPVAV ALDTKGPEIR TGLIKGSGTA EVELKKGATL KITLDNAYME KCDENILWLD YKNICKVVEV GSKIYVDDGL ISLQVKQKGA DFLVTEVENG GSLGSKKGVN LPGAAVDLPA VSEKDIQDLK FGVEQDVDMV FASFIRKASD VHEVRKVLGE KGKNIKISK IENHEGVRRF DEILEASDGI MVARGLGIE IPAEKVFLAQ KMMIGRCNRA GKPVICATQM LESMIKKPRP TRAEAGSDVAN AVLDGADCIM LSGETAKGDY PLEAVRMQHL IAREAEAAIY HLQLFEELRR LAPITSDPTE ATAVGAVEAS FKCCSGAIM LTKSGRSAHQ VARYRPRAPI IAVTRNPQTA RQAHLYRGIF PVLCKDPVQE AWAEDVDLRV NFAMNVGKAR GFFKKGDVVI VLTGWRPGSG FTNTMRVVPV P </pre>	
<b>Predicted molecular weight</b>	60 kDa	
<b>Amino acids</b>	1 to 531	
<b>Tags</b>	His tag N-Terminus	
<b>Additional sequence information</b>	(NP_002645)	

## Specifications

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Our **Abpromise guarantee** covers the use of **ab89364** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	Functional Studies Western blot SDS-PAGE
<b>Form</b>	Liquid
<b>Additional notes</b>	Endotoxin Levels determined by LAL method.

## Preparation and Storage

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<b>Stability and Storage</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.316% Tris HCl, 10% Glycerol (glycerin, glycerine) This product is an active protein and may elicit a biological response in vivo, handle with caution.
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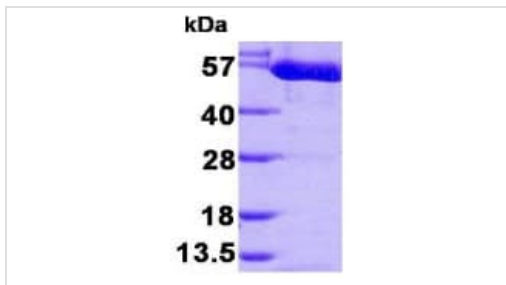
## General Info

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<b>Function</b>	Glycolytic enzyme that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP. Stimulates POU5F1-mediated transcriptional activation. Plays a general role in caspase independent cell death of tumor cells. 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.
<b>Tissue specificity</b>	Specifically expressed in proliferating cells, such as embryonic stem cells, embryonic carcinoma cells, as well as cancer cells.
<b>Pathway</b>	Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 5/5.
<b>Sequence similarities</b>	Belongs to the pyruvate kinase family.
<b>Post-translational modifications</b>	Phosphorylated upon DNA damage, probably by ATM or ATR. ISGylated.
<b>Cellular localization</b>	Cytoplasm. Nucleus. Translocates to the nucleus in response to different apoptotic stimuli. Nuclear translocation is sufficient to induce cell death that is caspase independent, isoform-specific and independent of its enzymatic activity.

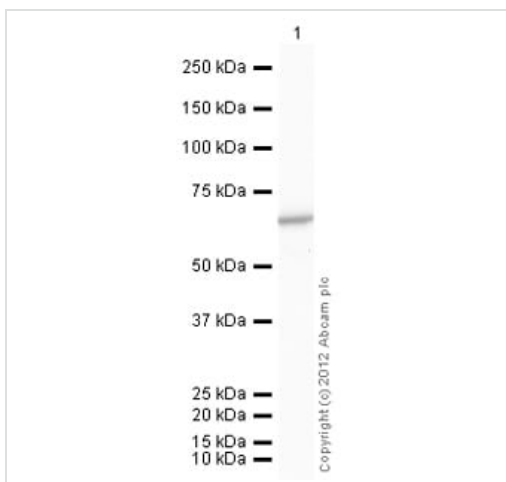
## Images

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SDS-PAGE - Recombinant human PKM2 protein  
(ab89364)

3ug of reduced ab89364 on SDS-PAGE, stained with Coomassie Blue.



Western blot - Recombinant human PKM2 protein  
(ab89364)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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