

Recombinant human PKM2 protein ab196081

2 Images

Description	
Product name	Recombinant human PKM2 protein
Biological activity	<p><b>Specific Activity:</b> ≥54 pmol/min/μg</p> <p><b>Assay Conditions:</b> A 50 μl reaction is conducted in a buffer containing 50 mM Tris (pH 7.4), 10 mM MgCl<sub>2</sub>, 50 mM KCl, 2 mM ADP, 10 mM phosphoenolpyruvate (PEP) at room temperature for 15 min. ATP production is detected using Kinase Assay.</p>
Purity	≥ 80 % SDS-PAGE.
Expression system	Escherichia coli
Accession	<b><u>P14618</u></b>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MHHHHHHSKPHSEAGTAFIQTLHAAMADTFLEHMCRL DIDSPITARN TGIICTIGPASRSVETLKEMIKSGMNVARLNFSGTHEYHAE TIKNVRTA TESFASDPILYRPVAVALDTKGPEIRTGLIKSGTAEVELKK GATLKITL DNAYMEKCDENILWLDYKNICKVVEVGSKIYVDDGLISLQV KQKGADFLV TEVENGGSLSKKGVNLPGAAVDLPVSEKDIQDLKFGV EQDVDMVFASF IRKASDVHEVRKVLGEKGKNIISKIENHEGVRRFDEILEAS DGIMVAR GDLGIEIPAEKVFLAQKMMIGRCNRAGKPVICATQMLESMI KKPRPTRAE GSDVANAVLDGADCIMLSGETAKGDYPLEAVRMQHILIAR EAEAAMFHRKL FEELVRASSHSTDLMAMAMGSVEASYKCLAAALMLTES GRSAHQVARY RPRAPIAVTRNPQTARQAHLRYGIFPVLCKDPVQEAWAE DVDLRVNFAM NVGKARGFFKKGDVVVLTGWRPGSGFTNTMRVVPVP

<b>Predicted molecular weight</b>	59 kDa including tags
<b>Amino acids</b>	1 to 531
<b>Tags</b>	His tag N-Terminus
<b>Additional sequence information</b>	GenBank Accession No. NM_182470

## Specifications

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Our **Abpromise guarantee** covers the use of **ab196081** 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>	SDS-PAGE
	Functional Studies

<b>Form</b>	Liquid
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## Preparation and Storage

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<b>Stability and Storage</b>	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle. pH: 8.00 Preservative: 0.45% Imidazole Constituents: 0.63% Tris HCl, 0.64% Sodium chloride, 0.02% Potassium chloride, 20% Glycerol (glycerin, glycerine), 0.05% (R*,R*)-1,4-Dimercaptobutan-2,3-diol This product is an active protein and may elicit a biological response in vivo, handle with caution.
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## General Info

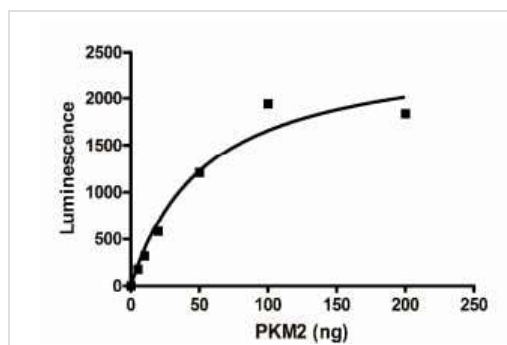
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<b>Function</b>	Glycolytic enzyme that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP. Stimulates POU5F1-mediated transcriptional activation. Plays a general role in caspase independent cell death 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.

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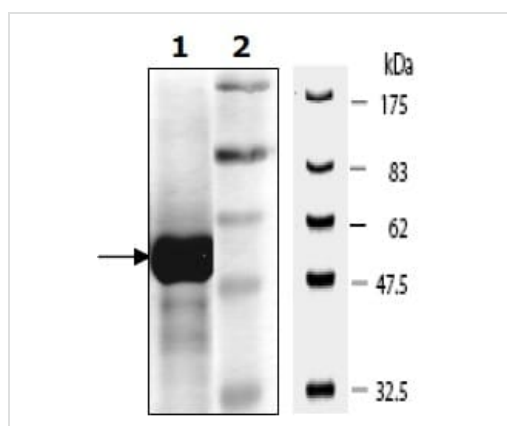
## Images

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Functional Studies - Recombinant human PKM2 protein (ab196081)

Specific activity of ab196081 was determined to be 54 pmol/min/μg



SDS-PAGE - Recombinant human PKM2 protein (ab196081)

SDS-PAGE using 13.5 μg ab196081 (Lane 1). Lane 2 shows protein marker.

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

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