

Product datasheet

Recombinant mouse PKM2 protein ab95474

2 Images

Description

<b>Product name</b>	Recombinant mouse PKM2 protein
<b>Biological activity</b>	Specific Activity: 11 pmol/min/μg. A 50 μl PKM2 reaction is conducted in a buffer containing 50 mM Tris (pH 7.4), 100mM MgCl <sub>2</sub> , 250 mM KCl, 40 mM ADP, 100 mM phosphoenolpyruvate (PEP) at room temperature for 15 min. ATP production is detected using Kinase-Glo Luminescent Kinase Assay Platform.
<b>Purity</b>	> 90 % SDS-PAGE.
<b>Expression system</b>	Escherichia coli
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Mouse

Specifications

Our [Abpromise guarantee](#) covers the use of **ab95474** 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 SDS-PAGE
<b>Form</b>	Liquid

Preparation and Storage

<b>Stability and Storage</b>	Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.0462% (R*,R*)-1,4-Dimercaptobutan-2,3-diol, 0.395% Tris HCl, 0.05% Tween, 30% Glycerol (glycerin, glycerine), 0.58% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

## Function

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.

## Tissue specificity

Specifically expressed in proliferating cells, such as embryonic stem cells, embryonic carcinoma cells, as well as cancer cells.

## Pathway

Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 5/5.

## Sequence similarities

Belongs to the pyruvate kinase family.

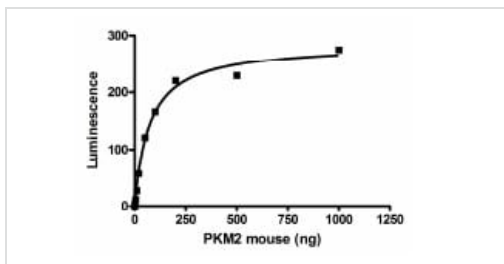
## Post-translational modifications

Phosphorylated upon DNA damage, probably by ATM or ATR.  
ISGylated.

## Cellular localization

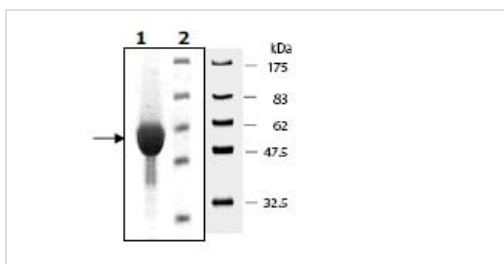
Cytoplasm. Nucleus. Translocates to the nucleus in response to different apoptotic stimuli. Nuclear translocation is sufficient to induce cell death that is caspase independent, isoform-specific and independent of its enzymatic activity.

## Images



Specific activity curve of ab95474

Functional Studies - Recombinant mouse PKM2 protein (ab95474)



10% SDS-PAGE

Lane 1: 10µg ab95474

Lane 2: Molecular Weight markers

SDS-PAGE - Recombinant mouse PKM2 protein (ab95474)

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

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