

## Product datasheet

# Anti-PKM antibody ab137791

★★★★★ 6 Abreviews 5 References 8 Images

### Overview

<b>Product name</b>	Anti-PKM antibody
<b>Description</b>	Rabbit polyclonal to PKM
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IP, WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant fragment corresponding to Human PKM aa 243-531. Database link: <a href="#">P14618</a>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</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.
<b>Storage buffer</b>	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: PBS, 20% Glycerol
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

Our [Abpromise guarantee](#) covers the use of **ab137791** in the following tested applications.

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

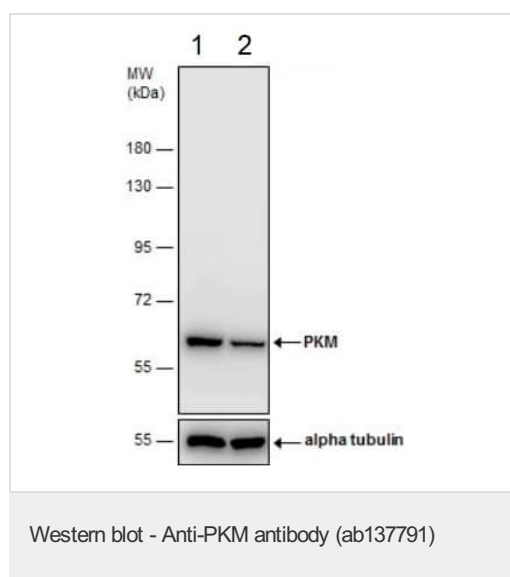
Application	Abreviews	Notes
IP		1/100 - 1/500.
WB	★★★★★	1/500 - 1/3000. Predicted molecular weight: 58 kDa.

Application	Abreviews	Notes
IHC-P		1/100 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

<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>	ISGylated. Under hypoxia, hydroxylated by EGLN3. Acetylation at Lys-305 is stimulated by high glucose concentration, it decreases enzyme activity and promotes its lysosomal-dependent degradation via chaperone-mediated autophagy. FGFR1-dependent tyrosine phosphorylation is reduced by interaction with TRIM35.
<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



**All lanes** : Anti-PKM antibody (ab137791) at 1/5000 dilution

**Lane 1** : Non-transfected (-) HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

**Lane 2** : HEK-293T whole cell extracts transfected (+) with PKM shRNA

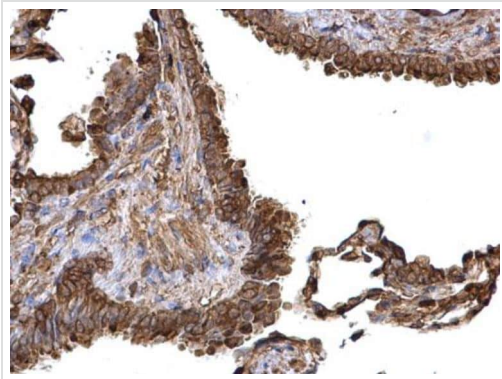
Lysates/proteins at 30 µg per lane.

### Secondary

**All lanes** : HRP-conjugated anti-rabbit IgG antibody

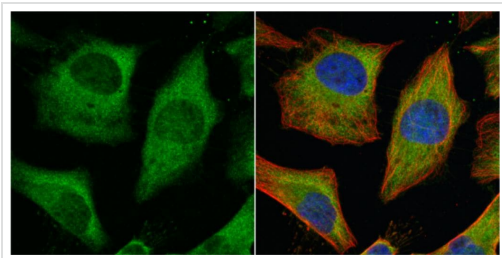
**Predicted band size:** 58 kDa

## 7.5% SDS-PAGE



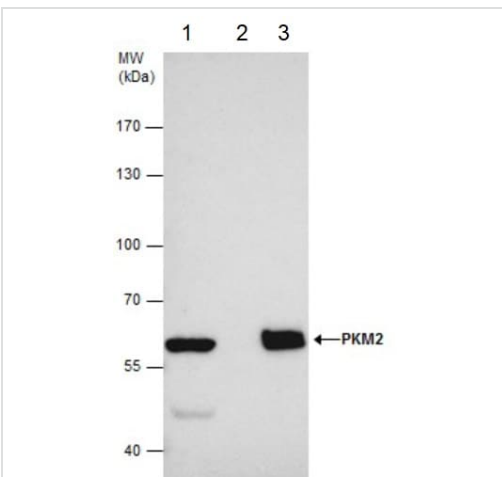
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKM antibody (ab137791)

Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue staining PKM protein at cytosol with ab137791 at 1/500 dilution. Antigen Retrieval: EDTA based buffer, pH 8.0, 15min.



Immunoprecipitation - Anti-PKM antibody (ab137791)

Immunofluorescence analysis of 4% paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell labelling Pyruvate Kinase (muscle) antibody detects Pyruvate Kinase (muscle) protein at cytoplasm (green) with ab137791 at 1/500 dilution. Red: alpha Tubulin, a cytoskeleton marker, stained by alpha Tubulin antibody at 1/500 dilution. Blue: Hoechst 33342 staining.



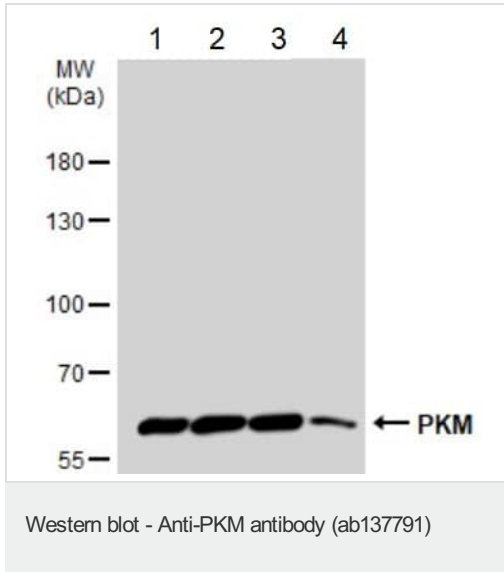
Immunoprecipitation - Anti-PKM antibody (ab137791)

Immunoprecipitation of PKM2 protein from HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate using 5  $\mu$ g of ab137791.

IP Sample:

- 1- HEK-293T cells
- 2- Control IgG
- 3- ab137791

Western blot analysis was performed using ab137791, followed by anti-Rabbit IgG antibody.



**All lanes** : Anti-PKM antibody (ab137791) at 1/1000 dilution

**Lane 1** : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

**Lane 2** : A431 (human epidermoid carcinoma cell line) whole cell lysate

**Lane 3** : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 4** : HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate

Lysates/proteins at 30 µg per lane.

### Secondary

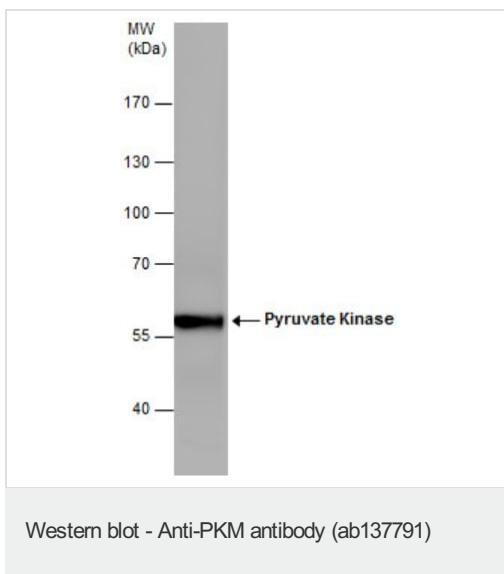
**All lanes** : HRP-conjugated anti-rabbit IgG antibody

**Predicted band size:** 58 kDa

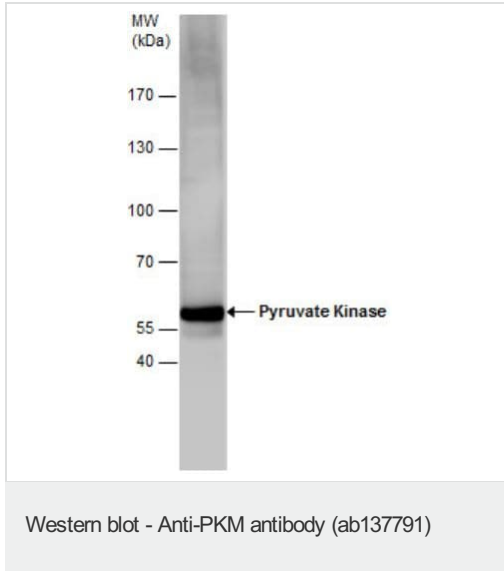
### 7.5% SDS-PAGE

Mouse brain tissue lysate at 50 µg

**Predicted band size:** 58 kDa



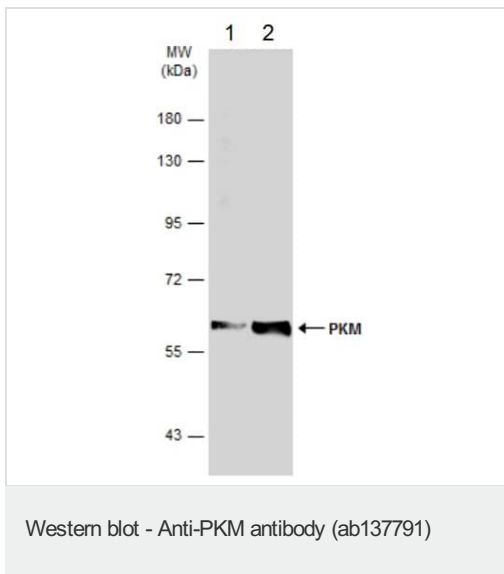
7.5 % SDS-PAGE



Anti-PKM antibody (ab137791) at 1/2000 dilution + Rat tissue lysate at 50 µg

**Predicted band size:** 58 kDa

7.5 % SDS-PAGE



**All lanes :** Anti-PKM antibody (ab137791) at 1/5000 dilution

**Lane 1 :** Non-transfected (-) HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

**Lane 2 :** Transfected (+) HEK-293T whole cell lysate

Lysates/proteins at 30 µg per lane.

**Secondary**

**All lanes :** HRP-conjugated anti-rabbit IgG antibody

**Predicted band size:** 58 kDa

7.5% SDS-PAGE

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