


### Anti-PCK1/PEPC antibody ab70358

★★★★★ [6 Abreviews](#) [26 References](#) [2 Images](#)

#### Overview

<b>Product name</b>	Anti-PCK1/PEPC antibody
<b>Description</b>	Rabbit polyclonal to PCK1/PEPC
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human <b>Predicted to work with:</b> Orangutan 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Recombinant Human PCK1/PEPC protein ( <a href="#">ab119469</a> ) can be used as a positive control in WB. This antibody gave a positive signal in the following lysates: HepG2 Whole Cell Lysate Rat Liver Tissue Lysate Mouse Liver Tissue Lysate Human Liver Tissue Lysate - adult normal tissue
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### 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>	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: PBS</p> <p>Batches of this product that have a concentration &lt; 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.</p>
<b>Purity</b>	Immunogen affinity purified

<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

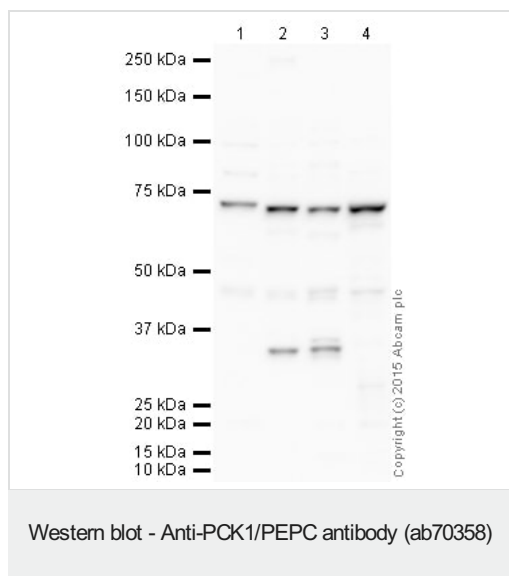
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab70358 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>WB</b>	★★★★★ (5)	Use a concentration of 1 µg/ml. Detects a band of approximately 69 kDa (predicted molecular weight: 69 kDa). Abcam recommends using milk as the blocking agent.

## Target

<b>Function</b>	Catalyzes the conversion of oxaloacetate (OAA) to phosphoenolpyruvate (PEP), the rate-limiting step in the metabolic pathway that produces glucose from lactate and other precursors derived from the citric acid cycle.
<b>Tissue specificity</b>	Major sites of expression are liver, kidney and adipocytes.
<b>Pathway</b>	Carbohydrate biosynthesis; gluconeogenesis.
<b>Involvement in disease</b>	Defects in PCK1 are the cause of cytosolic phosphoenolpyruvate carboxykinase deficiency (cytosolic PEPCK deficiency) [MIM:261680]. PEPCK deficiency is a metabolic disorder resulting from impaired gluconeogenesis. It is a rare disease with less than 10 cases reported in the literature. Clinical characteristics include hypotonia, hepatomegaly, failure to thrive, lactic acidosis and hypoglycemia. Autopsy reveals fatty infiltration of both the liver and kidneys. The disorder is transmitted as an autosomal recessive trait.
<b>Sequence similarities</b>	Belongs to the phosphoenolpyruvate carboxykinase [GTP] family.
<b>Post-translational modifications</b>	Acetylation is increased on addition of glucose and appears to regulate the protein stability.
<b>Cellular localization</b>	Cytoplasm.

## Images



**All lanes :** Anti-PCK1/PEPC antibody (ab70358) at 1 µg

**Lane 1 :** HepG2 (Human hepatocellular liver carcinoma cell line)  
Whole Cell Lysate

**Lane 2 :** Liver (Rat) Tissue Lysate

**Lane 3 :** Liver (Mouse) Tissue Lysate

**Lane 4 :** Human liver tissue lysate - total protein ([ab29889](#))

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Anti-Rabbit IgG VHH Single Domain (HRP) ([ab191866](#))  
at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 69 kDa

**Observed band size:** 69 kDa

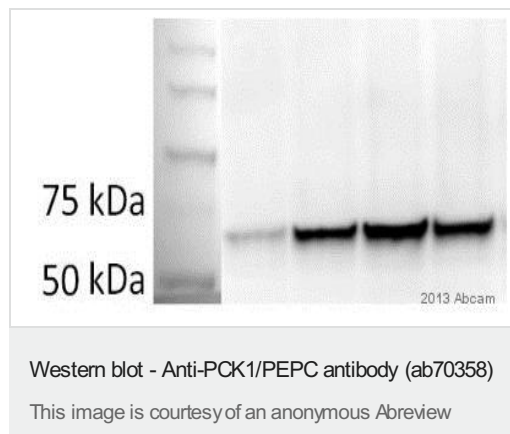
**Additional bands at:** 32 kDa, 45 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 20 seconds

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 1% Milk before being incubated with ab70358 overnight at 4°C. Antibody binding was detected using an anti-rabbit VHH single domain antibody conjugated to HRP, and visualised using ECL development solution

## **ab133406.**

Abcam recommends using milk as the blocking agent. Abcam welcomes customer feedback and would appreciate any comments regarding this product and the data presented above.



**All lanes :** Anti-PCK1/PEPC antibody (ab70358) at 1 µg/ml

**All lanes :** Mouse adipose tissue lysate

Lysates/proteins at 25 µg per lane.

### **Secondary**

**All lanes :** HRP conjugated Donkey anti-rabbit IgG polyclonal at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 69 kDa

**Observed band size:** 69 kDa

**Exposure time:** 5 hours

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

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