

## Product datasheet

# Anti-PCK2 antibody ab137580

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### Overview

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<b>Product name</b>	Anti-PCK2 antibody
<b>Description</b>	Rabbit polyclonal to PCK2
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant fragment, corresponding to a region within amino acids 10-243 of Human PCK2
<b>Positive control</b>	HepG2, HCT116, Neuro2A, GL261 and PC-12 cells. Breast carcinoma 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

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 20% Glycerol (glycerin, glycerine)
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

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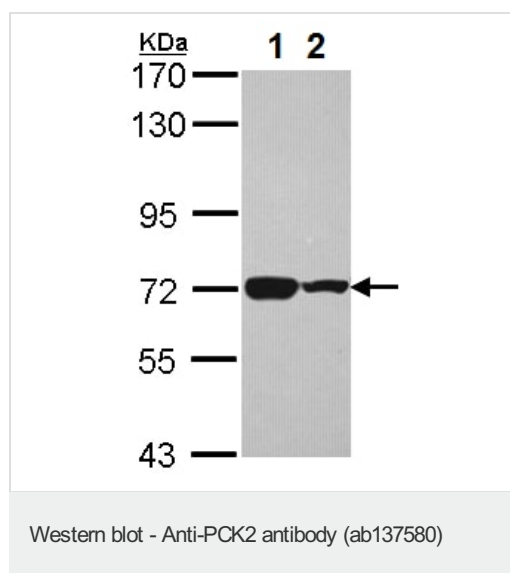
**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab137580 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 71 kDa.
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>	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>Pathway</b>	Carbohydrate biosynthesis; gluconeogenesis.
<b>Involvement in disease</b>	Defects in PCK2 are the cause of mitochondrial phosphoenolpyruvate carboxykinase deficiency (M-PEPCKD) [MIM:261650]. 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>	Phosphorylated upon DNA damage, probably by ATM or ATR.
<b>Cellular localization</b>	Mitochondrion.

## Images



**All lanes :** Anti-PCK2 antibody (ab137580) at 1/1000 dilution

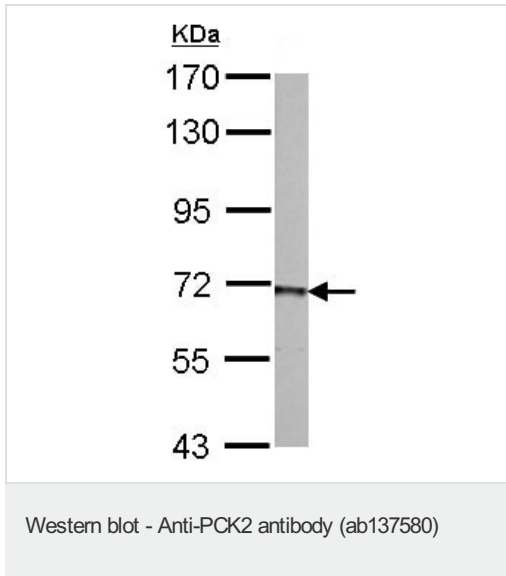
**Lane 1 :** HepG2 whole cell lysate

**Lane 2 :** HCT116 whole cell lysate

Lysates/proteins at 30 µg per lane.

**Predicted band size:** 71 kDa

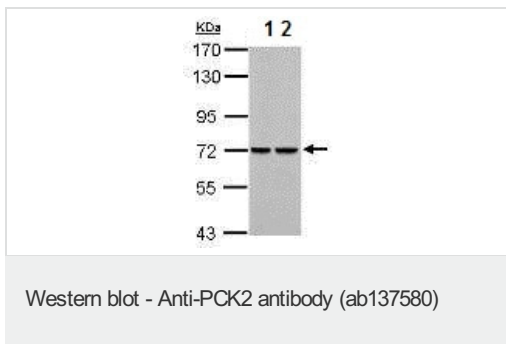
7.5% SDS-PAGE



Anti-PCK2 antibody (ab137580) at 1/1000 dilution + PC-12 whole cell lysate at 30 µg

**Predicted band size:** 71 kDa

7.5% SDS-PAGE



**All lanes :** Anti-PCK2 antibody (ab137580) at 1/1000 dilution

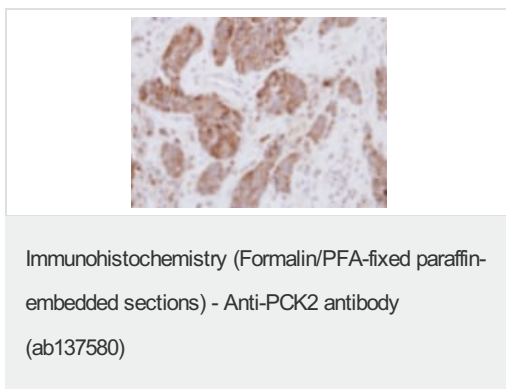
**Lane 1 :** Neuro2A whole cell lysate

**Lane 2 :** GL261 whole cell lysate

Lysates/proteins at 30 µg per lane.

**Predicted band size:** 71 kDa

7.5% SDS-PAGE



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue labelling PCK2 with ab137580 at 1/250 dilution.

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

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