

### Anti-PDK1 antibody [EPR19573] ab207450

敲除验证 重组 RabMAb

[18 References](#) [7 图像](#)

#### 概述

产品名称	Anti-PDK1抗体[EPR19573]
描述	兔单克隆抗体[EPR19573] to PDK1
宿主	Rabbit
经测试应用	适用于: WB, IP
种属反应性	与反应: Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HeLa, Hap1, HEK-293, Jurkat, HepG2, NIH/3T3, PC-12 and LNCaP whole cell lysates; human heart and kidney lysates; mouse brain, heart, kidney and spleen lysates; rat kidney and spleen lysates; HEK-293 mitochondria fraction lysate. IP: HepG2 whole cell lysate.
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR19573

## 应用

## The Abpromise guarantee

Abpromise™承诺保证使用ab207450于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/2000. Detects a band of approximately 47 kDa (predicted molecular weight: 49 kDa).
IP		1/40.

## 靶标

## 功能

Inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism.

## 组织特异性

Expressed predominantly in the heart.

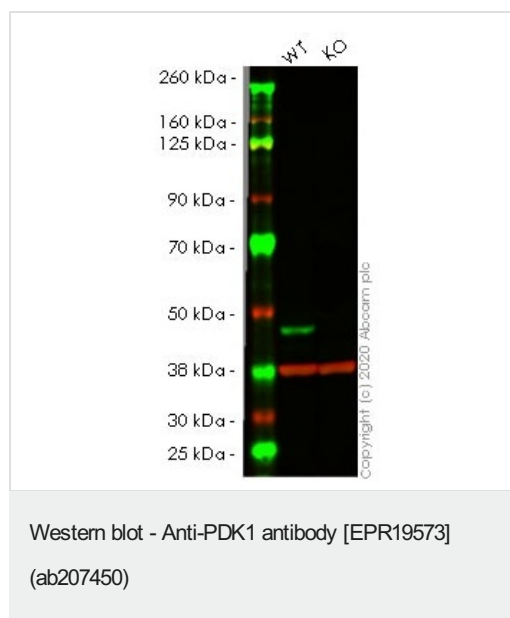
## 序列相似性

Belongs to the PDK/BCKDK protein kinase family.  
Contains 1 histidine kinase domain.

## 细胞定位

Mitochondrion matrix.

## 图片



**All lanes :** Anti-PDK1 antibody [EPR19573] (ab207450) at 1/2000 dilution

**Lane 1 :** Wild-type HeLa cell lysate

**Lane 2 :** PDK1 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

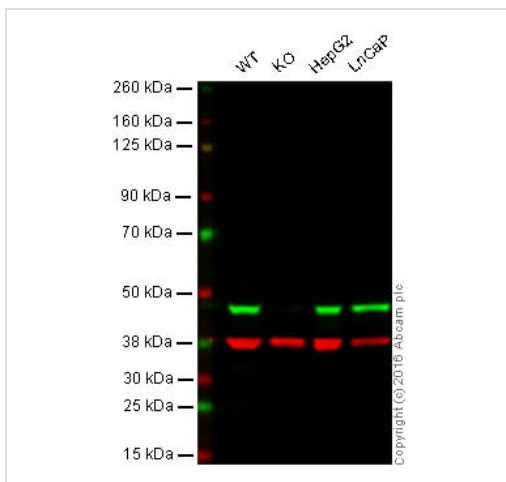
Performed under reducing conditions.

**Predicted band size:** 49 kDa

**Observed band size:** 45 kDa

**Lanes 1- 2:** Merged signal (red and green). Green - ab207450 observed at 45 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) observed at 37 kDa.

ab207450 was shown to react with PDK1 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line **ab264791** (knockout cell lysate **ab257164**) was used. Wild-type HeLa and PDK1 knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab207450 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) overnight at 4°C at a 1 in 2000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-PDK1 antibody [EPR19573] (ab207450)

**All lanes :** Anti-PDK1 antibody [EPR19573] (ab207450) at 1/2000 dilution

**Lane 1 :** Wild-type HAP1 cell lysate

**Lane 2 :** PDK1 knockout HAP1 cell lysate

**Lane 3 :** HepG2 cell lysate

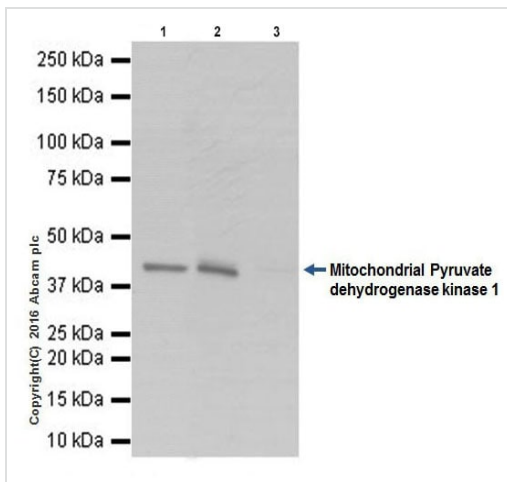
**Lane 4 :** LnCaP cell lysate

Lysates/proteins at 20 µg per lane.

**Predicted band size:** 49 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab207450 observed at 45 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab207450 was shown to specifically react with PDK1 in wild-type HAP1 cells. No band was observed when PDK1 knockout samples were examined. Wild-type and PDK1 knockout samples were subjected to SDS-PAGE. Ab207450 and **ab8245** (loading control to GAPDH) were diluted at 1/2000 and 1/10,000 dilution respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Immunoprecipitation - Anti-PDK1 antibody  
[EPR19573] (ab207450)

PDK1 was immunoprecipitated from 1mg of HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate with ab207450 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab207450 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/10000 dilution.

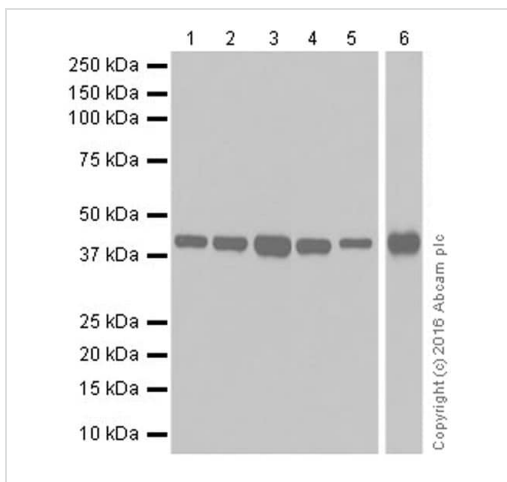
Lane 1: HepG2 whole cell lysate 10µg (Input).

Lane 2: ab207450 IP in HepG2 whole cell lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab207450 in HepG2 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 1 second.



Western blot - Anti-PDK1 antibody [EPR19573]  
(ab207450)

**All lanes** : Anti-PDK1 antibody [EPR19573] (ab207450) at 1/2000 dilution

**Lane 1** : HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

**Lane 2** : Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

**Lane 3** : HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

**Lane 4** : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

**Lane 5** : PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate

**Lane 6** : LNCaP (Human prostate cancer cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

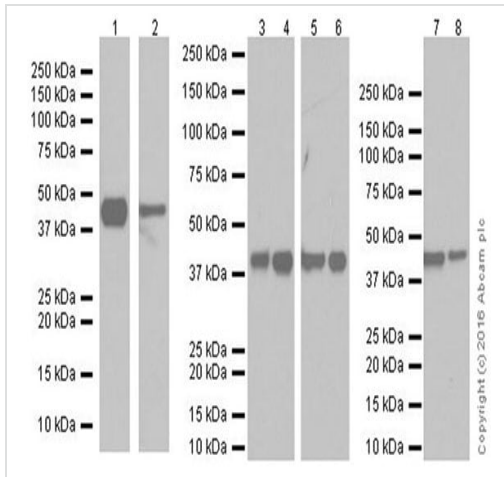
**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 49 kDa

**Observed band size:** 47 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1-5: 15 seconds; Lane 6: 8 seconds.



Western blot - Anti-PDK1 antibody [EPR19573]  
(ab207450)

**All lanes** : Anti-PDK1 antibody [EPR19573] (ab207450) at 1/2000 dilution

**Lane 1** : Human heart lysate

**Lane 2** : Human kidney lysate

**Lane 3** : Mouse brain lysate

**Lane 4** : Mouse heart lysate

**Lane 5** : Mouse kidney lysate

**Lane 6** : Mouse spleen lysate

**Lane 7** : Rat kidney lysate

**Lane 8** : Rat spleen lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**Lanes 1-2** : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

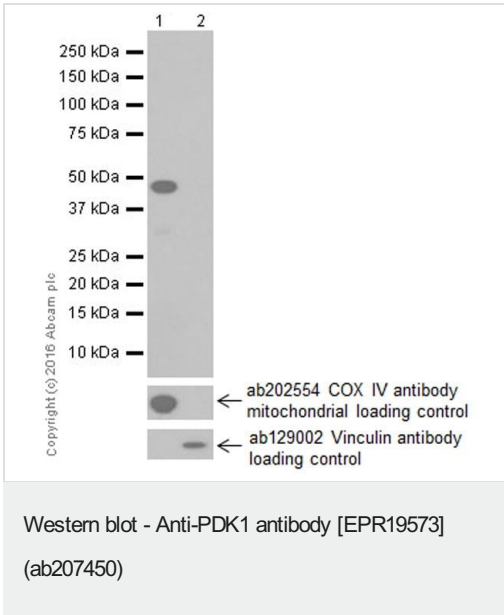
**Lanes 3-8** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

**Predicted band size:** 49 kDa

**Observed band size:** 47 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1/3/4: 8 seconds; Lane 2: 30 seconds; Lane 5/6: 3 minutes; Lane 7/8: 15 seconds.



**All lanes :** Anti-PDK1 antibody [EPR19573] (ab207450) at 1/5000 dilution

**Lane 1 :** HEK-293 (Human epithelial cell line from embryonic kidney) mitochondria fraction lysate

**Lane 2 :** HEK-293 (Human epithelial cell line from embryonic kidney) cytosol fraction lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

**Predicted band size:** 49 kDa

**Observed band size:** 47 kDa

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-PDK1 antibody [EPR19573] (ab207450)

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

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