# abcam

## Product datasheet

## Anti-PDK2 antibody [EPR1948Y] ab68164





重组 RabMAb

★★★★★ 2 Abreviews 20 References 7 图像

概述

产品名称 Anti-PDK2抗体[EPR1948Y]

描述 兔单克隆抗体[EPR1948Y] to PDK2

宿主 Rabbit

特异性 The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for

mouse and rat.

经测试应用 适用于: WB, IHC-P, IP

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide within Human PDK2 aa 350 to the C-terminus (C terminal). The exact sequence

is proprietary.

Database link: Q15119

阳性对照 WB: Mouse, rat and human heart lysate, rat skeletal lysate, HAPI and SHSY5Y cell lysates; IP: Rat

heart lysate; IHC-P: Human bladder carcinoma and cardiac muscle.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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: 7.20

Preservative: 0.01% Sodium azide

Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS

纯度 Protein A purified

**克隆** 单克隆

**克隆编号** EPR1948Y

**同种型** IgG

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab68164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)	1/200. Detects a band of approximately 46 kDa (predicted molecular weight: 46 kDa).  For unpurified use at 1/500 - 1/2000.
IHC-P		1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See IHC antigen retrieval protocols.  For unpurified use at 1/100 - 1/250.
IP		1/20.

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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 in many tissues, with the highest level in heart and skeletal muscle, intermediate levels

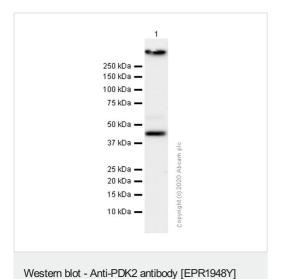
in brain, kidney, pancreas and liver, and low levels in placenta and lung.

**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



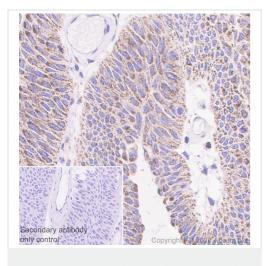
(ab68164)

Anti-PDK2 antibody [EPR1948Y] (ab68164) at 1/200 dilution (Purified) + Human heart lysate

#### Secondary

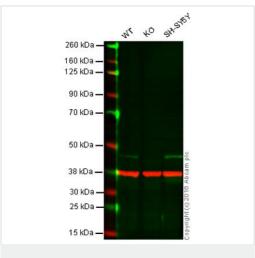
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

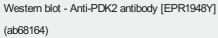
Predicted band size: 46 kDa

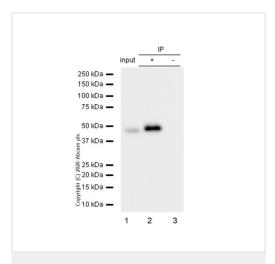


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PDK2 antibody
[EPR1948Y] (ab68164)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human bladder carcinoma tissue sections labeling PDK2 with Purified ab68164 at 1/1000 dilution (0.12 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.







Immunoprecipitation - Anti-PDK2 antibody [EPR1948Y] (ab68164)

Lane 1: Wild-type HAP1 cell lysate (40 µg)

Lane 2: PDK2 knockout HAP1 cell lysate (40 µg)

Lane 3: SH-SY5Y cell lysate (40 ug)

Lanes 1 - 3: Merged signal (red and green). Green - ab68164 observed at 45 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab68164 was shown to specifically react with PDK2 in wild-type HAP1 cells. No band was observed when PDK2 knockout samples were examined. Wild-type and PDK2 knockout samples were subjected to SDS-PAGE. Ab68164 and **ab8245** (loading control to GAPDH) were diluted at 1/500 and 1/10,000 dilution respectively and incubated overnight at 4°C. Blots were developed with IRDye® 800CW Goat anti-Rabbit IgG (H + L) **ab216773** and IRDye® 680 Goat anti-Mouse IgG (H + L) **ab216776** secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.

Purified ab68164 at 1/20 dilution (0.6 $\mu$ g) immunoprecipitating PDK2 in Rat heart lysate.

Lane 1 (input): Rat heart lysate 10µg

Lane 2 (+): ab68164 + Rat heart lysate.

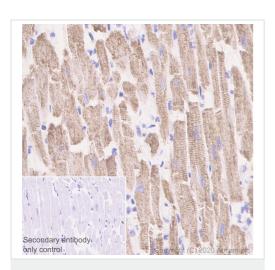
Lane 3 (-): Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab68164 in Rat heart lysate.

VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

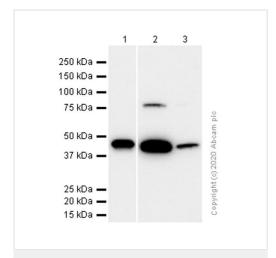
Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 48 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PDK2 antibody
[EPR1948Y] (ab68164)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cardiac muscle tissue sections labeling PDK2 with Purified ab68164 at 1/1000 dilution (0.12 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-PDK2 antibody [EPR1948Y] (ab68164)

**All lanes :** Anti-PDK2 antibody [EPR1948Y] (ab68164) at 1/1000 dilution (Purified)

Lane 1: Mouse heart lysate

Lane 2: Rat heart lysate

Lane 3: Rat skeletal muscle lysate

## Secondary

**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 46 kDa



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

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