# abcam

### Product datasheet

# Anti-PDPK1 antibody [EP569Y] ab52893





重组 RabMAb

25 References 8 图像

概述

产品名称 Anti-PDPK1抗体[EP569Y]

描述 兔单克隆抗体[EP569Y] to PDPK1

宿主 Rabbit

特异性 This antibody detects PDK1 both when phosphorylated and non-phosphorylated on Tyrosine 373

The mouse, rat and pig recommendation is based on the WB results. We do not guarantee IHC-P

for mouse, rat and pig.

适用于: WB, IHC-P 经测试应用

不适用于: Flow Cyt,ICC/IF or IP

种属反应性 与反应: Mouse, Rat, Human, Pig

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: PC-12, Rat testis, HEK-293, 22Rv1, PIEC, HeLa, K-562, and F9 lysates. IHC-P: human lung

carcinoma and human prostate carcinoma tissue.

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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

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

纯**度** Protein A purified

**克隆** 単克隆

**克隆编号** EP569Y

**同种型** IgG

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab52893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		1/1000. Detects a band of approximately 64 kDa (predicted molecular weight: 63 kDa).
IHC-P		1/150. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.  The mouse, rat and pig recommendation is based on the WB results. We do not guarantee IHC-P for mouse, rat and pig.  See IHC antigen retrieval protocols.

应用说明 Is unsuitable for Flow Cyt,ICC/IF or IP.

靶标

功能 Phosphorylates and activates not only PKB/AKT, but also PKA, PKC-zeta, RPS6KA1 and

RPS6KB1. May play a general role in signaling processes and in development (By similarity).

Isoform 3 is catalytically inactive.

组织**特异性** Appears to be expressed ubiquitously.

序列相似性 Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PDK1 subfamily.

Contains 1 PH domain.

Contains 1 protein kinase domain.

翻译后修饰 Phosphorylated on tyrosine and serine/threonine. Phosphorylation on Ser-241 in the activation

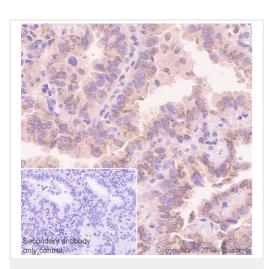
loop is required for full activity. PDK1 itself can autophosphorylate Ser-241, leading to its own

activation.

细胞定位 Cytoplasm. Membrane. Membrane-associated after cell stimulation leading to its translocation.

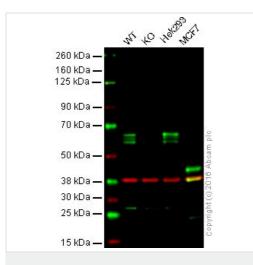
Tyrosine phosphorylation seems to occur only at the plasma membrane.

图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PDPK1 antibody
[EP569Y] (ab52893)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lung carcinoma tissue sections labeling PDPK1 with Purified ab52893 at 1:150 dilution(2.4 µg/ml). Perform heat mediated antigen retrieval using <a href="mailto:ab93684">ab93684</a> (Tris/EDTA buffer, pH 9.0). Purified)ImmunoHistoProbe one step HRP Polymer (ready to use) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-PDPK1 antibody [EP569Y] (ab52893)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

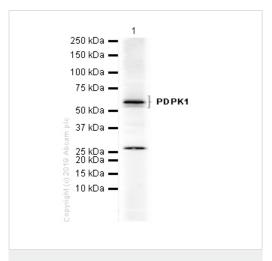
Lane 2: PDPK1 knockout HAP1 cell lysate (20 µg)

Lane 3: HEK293 cell lysate (20 µg)

Lane 4: MCF7 cell lysate (20 µg)

**Lanes 1 - 4**: Merged signal (red and green). Green - ab52893 observed at 70 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab52893 was shown to recognize PDPK1 when PDPK1 knockout samples were used, along with additional cross-reactive bands. Wild-type and PDPK1 knockout samples were subjected to SDS-PAGE. ab52893 and <a href="mailto:ab8245">ab8245</a> (loading control to GAPDH) were diluted 1/1000 and 1/10 000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-PDPK1 antibody [EP569Y] (ab52893)



Western blot - Anti-PDPK1 antibody [EP569Y] (ab52893)

Anti-PDPK1 antibody [EP569Y] (ab52893) at 1/1000 dilution (Purified) + F9 (Mouse embryonal carcinoma epithelial cell) whole cell lysates at 15 µg

#### Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/5000 dilution

**Predicted band size:** 63 kDa **Observed band size:** 52-65 kDa

The molecular weight observed is consistent with what has been described in PMID: 30171166

**All lanes :** Anti-PDPK1 antibody [EP569Y] (ab52893) at 1/1000 dilution (Purified)

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

**Lane 2**: K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysates

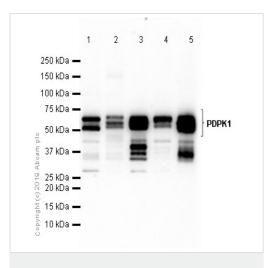
Lysates/proteins at 20 µg per lane.

#### **Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/5000 dilution

**Predicted band size:** 63 kDa **Observed band size:** 52-65 kDa

The molecular weight observed is consistent with what has been described in PMID: 30171166



Western blot - Anti-PDPK1 antibody [EP569Y] (ab52893)

**All lanes :** Anti-PDPK1 antibody [EP569Y] (ab52893) at 1/1000 dilution (Purified)

**Lane 1**: PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysates

Lane 2: Rat testis lysates

**Lane 3**: HEK-293 (Human embryonic kidney epithelial cell) whole cell lysates

**Lane 4 :** 22Rv1 (Human prostate carcinoma epithelial cell) whole cell lysates

Lane 5: PIEC (PIG iliac artery endothelial cell) whole cell lysates

Lysates/proteins at 20 µg per lane.

## Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

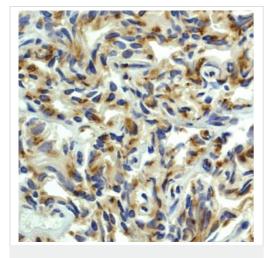
Predicted band size: 63 kDa

Observed band size: 52-65 kDa

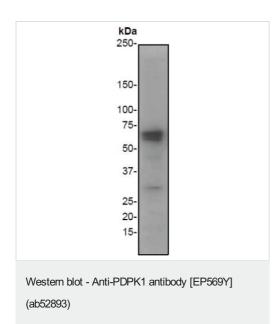
The molecular weight observed is consistent with what has been described in PMID: 30171166

Ab52893 (1:100) staining human PDPK1 in human prostate carcinoma tissue by immunohistochemistry using paraffin embedded tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

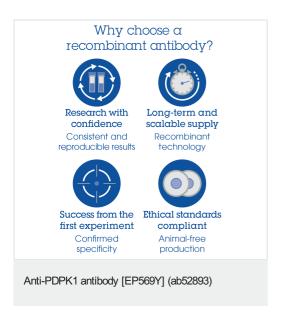


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PDPK1 antibody
[EP569Y] (ab52893)



Anti-PDPK1 antibody [EP569Y] (ab52893) at 1/1000 dilution + 293 cell lysate

**Predicted band size:** 63 kDa **Observed band size:** 63 kDa



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