# abcam

# Product datasheet

# Anti-PDK2 antibody [EPR1948Y] ab68164



ייבער RabMAb

★★★★★ 2 Abreviews 20 References 画像数7

#### 製品の概要

製品名 Anti-PDK2 antibody [EPR1948Y]

製品の詳細 Rabbit monoclonal [EPR1948Y] to PDK2

由来種 Rabbit

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

mouse and rat.

アプリケーション 適用あり: WB, IHC-P, IP

種交差性 交差種: 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

ポジティブ・コントロール 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.

特記事項 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**.

#### 製品の特性

製品の状態 Liquid

保存方法 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.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

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

精製度 Protein A purified

ポリモノ モノクローナル クローン名 **EPR1948Y** 

アイソタイプ ΙgG

# アプリケーション

Abpromise保証は、次のテスト済みアプリケーションにおけるab68164の使用に適用されます The Abpromise guarantee アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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.

# ターゲット情報

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

組織特異性 Expressed in many tissues, with the highest level in heart and skeletal muscle, intermediate levels

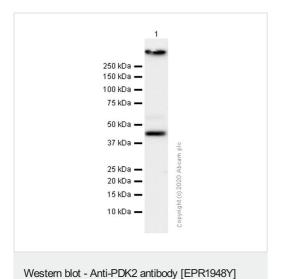
in brain, kidney, pancreas and liver, and low levels in placenta and lung.

配列類似性 Belongs to the PDK/BCKDK protein kinase family.

Contains 1 histidine kinase domain.

細胞内局在 Mitochondrion matrix.

# 画像



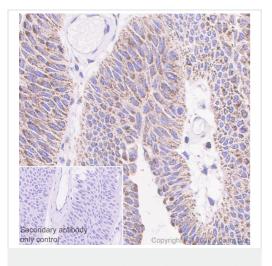
(ab68164)

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

#### Secondary

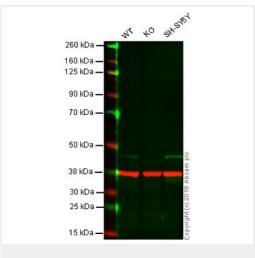
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 46 kDa

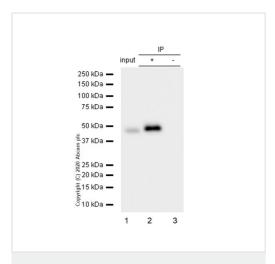


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PDK2 antibody
[EPR1948Y] (ab68164)

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.

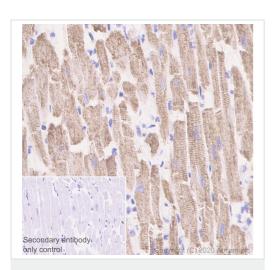
Lane 3 (-): Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab68164 in Rat heart lysate.

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

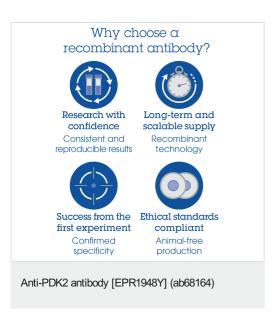
Lane 2: Rat heart lysate

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



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