# abcam

## Product datasheet

## Anti-PDK2 antibody [EPR1948Y] - BSA and Azide free ab227847



ייבעדער RabMAb

6 References 画像数7

#### 製品の概要

製品名 Anti-PDK2 antibody [EPR1948Y] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR1948Y] to PDK2 - BSA and Azide free

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. This information is proprietary to Abcam and/or its suppliers.

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 ab227847 is the carrier-free version of ab68164.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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**.

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#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

**バッファー** pH: 7.2

Constituent: PBS

キャリア・フリー はい

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 IgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab227847の使用に適用されます 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		Use at an assay dependent concentration. Detects a band of approximately 46 kDa (predicted molecular weight: 46 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.  See IHC antigen retrieval protocols.
IP		Use at an assay dependent concentration.

## ターゲット情報

組織特異性

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

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

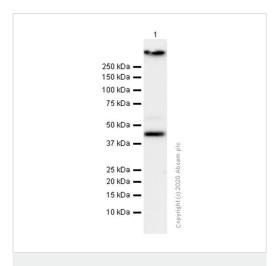
in brain, kidney, pancreas and liver, and low levels in placenta and lung.

**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



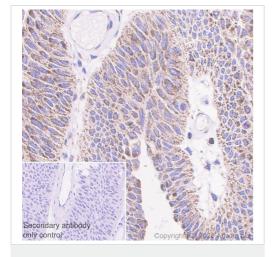
Western blot - Anti-PDK2 antibody [EPR1948Y] - BSA and Azide free (ab227847)

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

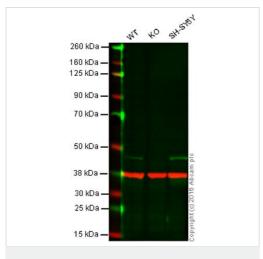


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PDK2 antibody

[EPR1948Y] - BSA and Azide free (ab227847)

This data was developed using <u>ab68164</u>, the same antibody clone in a different buffer formulation.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human bladder carcinoma tissue sections labeling PDK2 with Purified <u>ab68164</u> 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 (<u>ab209101</u>) 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] - BSA and Azide free (ab227847)

This data was generated using <u>ab68164</u>, the same antibody clone in a different buffer formulation.

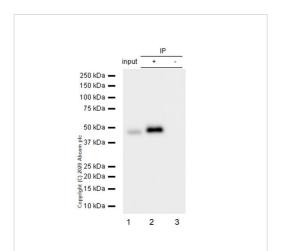
Lane 1: Wild-type HAP1 cell lysate (40 µg)

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

Lane 3: SHSY5Y cell lysate (40 ug)

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

ab68164 was shown to specifically react with PDK2 when PDK2 knockout samples were used. 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 4C. 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.



Immunoprecipitation - Anti-PDK2 antibody [EPR1948Y] - BSA and Azide free (ab227847)

This data was developed using <u>ab68164</u>, the same antibody clone in a different buffer formulation.

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

Lane 1 (input): Rat heart lysate 10µg

Lane 2 (+): <u>ab68164</u> + Rat heart lysate.

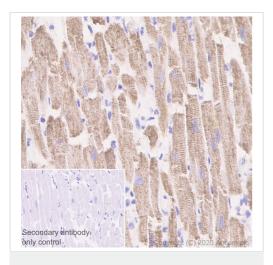
Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab68164</u> in Rat heart lysate.

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] - BSA and Azide free (ab227847)

This data was developed using <u>ab68164</u>, the same antibody clone in a different buffer formulation.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cardiac muscle tissue sections labeling PDK2 with Purified <u>ab68164</u> 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 (<u>ab209101</u>) 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] - BSA and Azide free (ab227847)

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

Lane 1: Mouse heart lysate

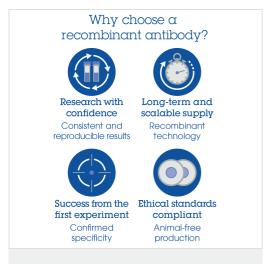
Lane 2: Rat heart lysate

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



Anti-PDK2 antibody [EPR1948Y] - BSA and Azide free (ab227847)

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