# abcam

## Product datasheet

# Anti-PDK4 antibody [1C2BG5] ab110336



★★★★★ 1 Abreviews 9 References 4 图像

概述

产品名称 Anti-PDK4抗体[1C2BG5]

**小**鼠单克隆抗体[1C2BG5] to PDK4

宿主 Mouse

特异性 This antibody does not cross-react with other isoforms of Human PDK (i.e. PDK1, 2 or 3).

经测试应用 适用于: Flow Cyt (Intra), WB, ICC/IF

种属反应性 与反应: Human

免疫原 Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.

**阳性**对照 WB: HeLa and HepG2 (ab7900) cell lysates and human heart tissue lysate. ICC/IF: HepG2 cells.

Flow Cyt (intra): HepG2 cells.

常规说明 This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Product was previously marketed under the MitoSciences sub-brand.

性能

形式 Liquid

**存放**说明 Shipped at 4°C. Store at +4°C. Do Not Freeze.

**存储溶液** pH: 7.5

Preservative: 0.02% Sodium azide Constituent: HEPES buffered saline

纯**度** Proprietary Purification

1

纯**化**说明 Produced in vitro using hybridomas grown in serum-free medium, and then purified by

biochemical fractionation. Purity >95% by SDS-PAGE.

 克隆
 单克隆

 克隆编号
 1C2BG5

 同种型
 lgG2a

轻链类型

### 应用

The Abpromise guarantee Abpromise™承诺保证使用ab110336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。

kappa

应用	Ab评论	说明
Flow Cyt (Intra)		Use 1µg for 10 <sup>6</sup> cells.  ab170191 - Mouse monoclonal lgG2a, is suitable for use as an isotype control with this antibody.
WB	<b>★★★</b> ☆☆(1)	Use a concentration of 1 µg/ml. Predicted molecular weight: 46 kDa.
ICC/IF		Use a concentration of 10 µg/ml.

**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.

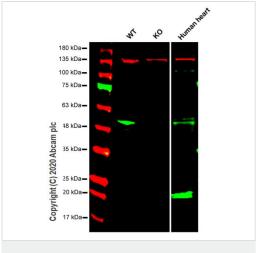
组织**特异性** Ubiquitous; highest levels of expression in heart and skeletal muscle.

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



Western blot - Anti-PDK4 antibody [1C2BG5] (ab110336)

**All lanes**: Anti-PDK4 antibody [1C2BG5] (ab110336) at 1/500 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: PDK4 knockout HeLa cell lysate

Lane 3: Human heart tissue lysate

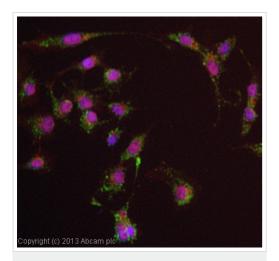
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 46 kDa **Observed band size:** 48 kDa

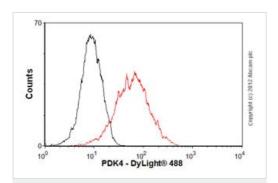
**Lanes 1-3:** Merged signal (red and green). Green - ab110336 observed at 48 kDa. Red - loading control, <u>ab129002</u> observed at 124 kDa.

ab110336 Anti-PDK4 antibody [1C2BG5] was shown to specifically react with PDK4 in wild-type HeLa cells. Loss of signal was observed when knockout cell line <a href="mailto:ab261805">ab261805</a> (knockout cell lysate <a href="mailto:ab257217">ab257217</a>) was used. Wild-type and PDK4 knockout samples were subjected to SDS-PAGE. ab110336 and Anti-Vinculin antibody [EPR8185] - Loading Control (<a href="mailto:ab129002">ab129002</a>) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 1000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216772">ab216772</a>) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216777">ab216772</a>) secondary antibodies at 1 in 10000 dilution for 1 hour at room temperature before imaging.

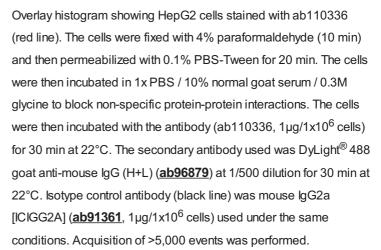


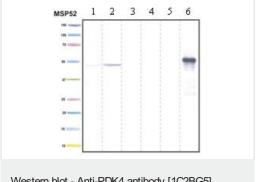
Immunocytochemistry/ Immunofluorescence - Anti-PDK4 antibody [1C2BG5] (ab110336)

ICC/IF image of ab110336 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab110336, 10 $\mu$ g/ml) overnight at +4°C. The secondary antibody (green) was **ab96879**, DyLight® 488 goat anti-mouse lgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 $\mu$ M.



Flow Cytometry (Intracellular) - Anti-PDK4 antibody [1C2BG5] (ab110336)





Western blot - Anti-PDK4 antibody [1C2BG5] (ab110336)

All lanes: Anti-PDK4 antibody [1C2BG5] (ab110336) at 1 µg/ml

Lane 1 : HepG2 whole cell lysate at 10  $\mu g$ 

Lane 2: Human heart tissue at 10 µg

Lane 3 : Recombinant Human PDK1 at 0.01  $\mu g$ 

Lane 4: Recombinant Human PDK2 at 0.01 µg

Lane 5: Recombinant Human PDK3 at 0.01 µg

Lane 6: Recombinant Human PDK4 at 0.01 µg

Predicted band size: 46 kDa

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

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