

Anti-PDK4 antibody [1C2BG5] ab110336

KO 評価済

★★★★☆ 1 Abreviews 9 References 画像数 4

製品の概要

製品名	Anti-PDK4 antibody [1C2BG5]
製品の詳細	Mouse monoclonal [1C2BG5] to PDK4
由来種	Mouse
特異性	This antibody does not cross-react with other isoforms of Human PDK (i.e. PDK1, 2 or 3).
アプリケーション	適用あり: Flow Cyt (Intra), WB, ICC/IF
種交差性	交差種: Human
免疫原	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HeLa and HepG2 (ab7900) cell lysates and human heart tissue lysate. ICC/IF: HepG2 cells. Flow Cyt (intra): HepG2 cells.
特記事項	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>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.</p> <p>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</p> <p>Product was previously marketed under the MitoSciences sub-brand.</p>

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: 7.5 Preservative: 0.02% Sodium azide Constituent: HEPES buffered saline
精製度	Proprietary Purification

特記事項 (精製)	Produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation. Purity >95% by SDS-PAGE.
ポリ/モノ	モノクローナル
クローン名	1C2BG5
アイソタイプ	IgG2a
軽鎖の種類	kappa

アプリケーション

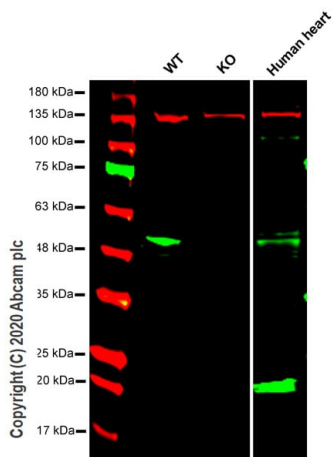
The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab110336の使用に適用されます
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		Use 1µg for 10 ⁶ cells. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	Use a concentration of 1 µg/ml. Predicted molecular weight: 46 kDa.
ICC/IF		Use a concentration of 10 µg/ml.

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	Ubiquitous; highest levels of expression in heart and skeletal muscle.
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-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.

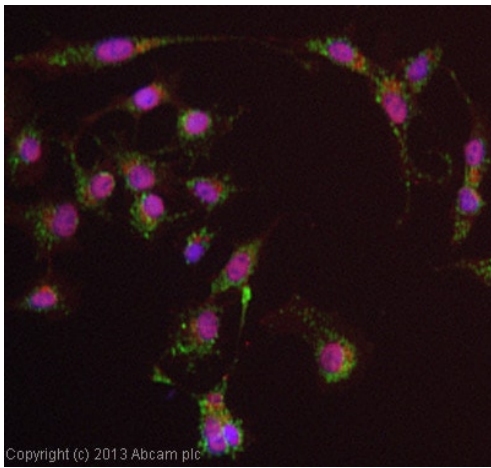
Performed under reducing conditions.

Predicted band size: 46 kDa

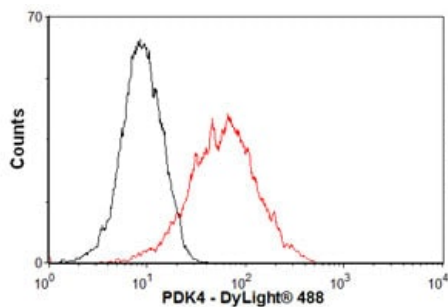
Observed band size: 48 kDa

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

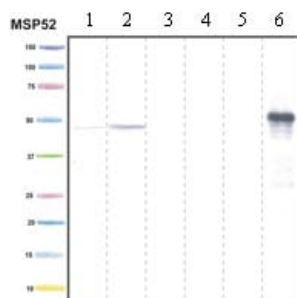
ab110336 Anti-PDK4 antibody [1C2BG5] was shown to specifically react with PDK4 in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab261805** (knockout cell lysate **ab257217**) was used. Wild-type and PDK4 knockout samples were subjected to SDS-PAGE. ab110336 and Anti-Vinculin antibody [EPR8185] - Loading Control (**ab129002**) 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 (**ab216772**) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (**ab216777**) secondary antibodies at 1 in 10000 dilution for 1 hour at room temperature before imaging.



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



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



Western blot - 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, 10µg/ml) overnight at +4°C. The secondary antibody (green) was [ab96879](#), DyLight® 488 goat anti-mouse IgG (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 1.43µM.

Overlay histogram showing HepG2 cells stained with ab110336 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab110336, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] ([ab91361](#), 1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

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

Lane 1 : HepG2 whole cell lysate at 10 µg

Lane 2 : Human heart tissue at 10 µg

Lane 3 : Recombinant Human PDK1 at 0.01 µg

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

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