abcam

Product datasheet

Anti-PHD2 / prolyl hydroxylase antibody [EPR3660(B)(2)] ab133630





RabMAb

★★★★★ 1 Abreviews 2 References 5 图像

概述

产品名称 Anti-PHD2 / prolyl hydroxylase抗体[EPR3660(B)(2)]

描述 兔单克隆抗体[EPR3660(B)(2)] to PHD2 / prolyl hydroxylase

宿主 Rabbit

经测试应用 适用于: WB, IP

不适用于: ICC/IF or IHC-P

种属反应性 与反应: Human

免疫原 Synthetic peptide within Human PHD2/ prolyl hydroxylase (N terminal). The exact sequence is

proprietary.

阳性对照 SH-SY5Y treated with cobalt chloride, SH-SY5Y, and Human adrenal gland lysates

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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

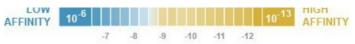
性能

形式 Liquid

存放说明 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.

解离常数(K_D) K_D = 1.43 x 10 ⁻¹¹ M



Learn more about KD

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 单克隆

克隆编号 EPR3660(B)(2)

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab133630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	★★★★ <u>(1)</u>	1/1000 - 1/10000. Predicted molecular weight: 46 kDa.
IP		1/10 - 1/100.

应用说明 Is unsuitable for ICC/IF or IHC-P.

靶标

功能 Catalyzes the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF)

alpha proteins. Hydroxylates HIF-1 alpha at 'Pro-402' and 'Pro-564', and HIF-2 alpha. Functions as a cellular oxygen sensor and, under normoxic conditions, targets HIF through the hydroxylation

for proteasomal degradation via the von Hippel-Lindau ubiquitination complex.

组织特异性 According to PubMed:11056053, widely expressed with highest levels in skeletal muscle and

heart, moderate levels in pancreas, brain (dopaminergic neurons of adult and fetal substantia nigra) and kidney, and lower levels in lung and liver. According to PubMed:12351678 widely expressed with highest levels in brain, kidney and adrenal gland. Expressed in cardiac myocytes,

aortic endothelial cells and coronary artery smooth muscle.

疾病相关 Defects in EGLN1 are the cause of erythrocytosis familial type 3 (ECYT3) [MIM:609820]. ECYT3

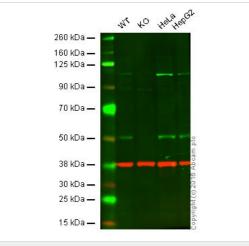
is an autosomal dominant disorder characterized by increased serum red blood cell mass,

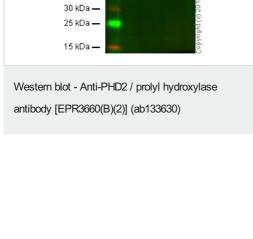
elevated serum hemoglobin and hematocrit, and normal serum erythropoietin levels.

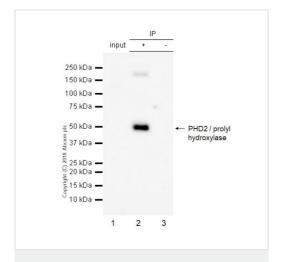
序列相似性 Contains 1 Fe2OG dioxygenase domain.

Contains 1 MYND-type zinc finger.

图片







Immunoprecipitation - Anti-PHD2 / prolyl hydroxylase antibody [EPR3660(B)(2)] (ab133630)

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

Lane 2: PHD2 / prolyl hydroxylase knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: HepG2 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab133630 observed at 1X kDa. Red - loading control, **ab8245**, observed at 37 kDa.

Unpurified ab133630 was shown to specifically react with PHD2 / prolyl hydroxylase when PHD2 / prolyl hydroxylase knockout samples were used. Wild-type and PHD2 / prolyl hydroxylase knockout samples were subjected to SDS-PAGE. Unpurified ab133630 and <u>ab8245</u> (loading control to GAPDH) were diluted 1/1000 and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye[®] 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse lgG H&L (IRDye[®] 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.

ab133630 (purified) at 1:40 dilution (2 μ g) immunoprecipitating PHD2 / prolyl hydroxylase in SH-SY5Y treated with 0.1mM cobalt chloride for 8 hours whole cell lysate.

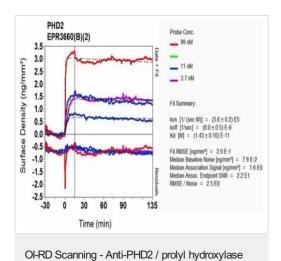
Lane 1 (input): SH-SY5Y (Human neuroblastoma epithelial cell) treated with 0.1mM cobalt chloride for 8 hours whole cell lysate 10µg

Lane 2 (+): ab133630 & SH-SY5Y treated with 0.1mM cobalt chloride for 8 hours whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab133630 in SH-SY5Y treated with 0.1mM cobalt chloride for 8 hours whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.

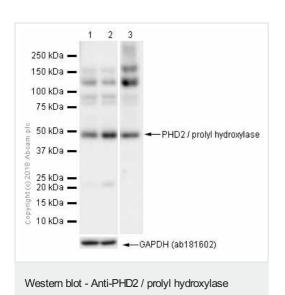


antibody [EPR3660(B)(2)] (ab133630)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D



antibody [EPR3660(B)(2)] (ab133630)

All lanes : Anti-PHD2 / prolyl hydroxylase antibody [EPR3660(B) (2)] (ab133630) at 1/5000 dilution (Purified)

Lane 1: SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysates with 5% NFDM/TBST

Lane 2 : SH-SY5Y (Human neuroblastoma epithelial cell) treated with 0.1mM cobalt chloride for 8 hours whole cell lysates with 5% NFDM/TBST

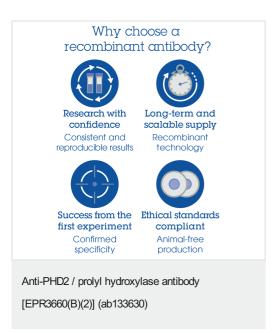
Lane 3: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates with 5% NFDM/TBST

Lysates/proteins at 20 µg per lane.

Secondary

 $\begin{tabular}{ll} \textbf{All lanes:} Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution \end{tabular}$

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



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