abcam

Product datasheet

Anti-IDH2 antibody [EPR7577] ab131263





重组 RabMAb

★★★★★ 1 Abreviews 16 References 9 图像

概述

产品名称 Anti-IDH2抗体[EPR7577]

描述 兔单克隆抗体[EPR7577] to IDH2

宿主 Rabbit

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

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: MOLT-4, K562, U-87 MG, and HepG2 cell 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.

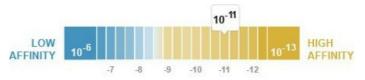
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

性能

形式

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

 $K_D = 4.70 \times 10^{-11} M$ 解离常数(KD)



Learn more about K_D

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

1

纯**度** Protein A purified

克隆 单克隆

克隆编号 EPR7577

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab131263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
Flow Cyt (Intra)		1/100 - 1/1000. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Detects a band of approximately 45 kDa (predicted molecular weight: 50 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF	**** (1)	1/1000.

功能		

Plays a role in intermediary metabolism and energy production. It may tightly associate or interact

with the pyruvate dehydrogenase complex.

疾病相关 D-2-hydroxyglutaric aciduria 2

Glioma

enetic variations are associated with cartilaginous tumors such as enchondroma or

chondrosarcoma.

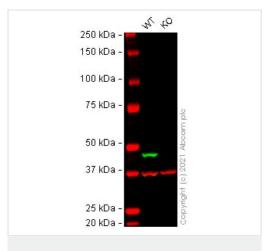
序列相似性 Belongs to the isocitrate and isopropylmalate dehydrogenases family.

翻译后修饰 Acetylation at Lys-413 dramatically reduces catalytic activity. Deacetylated by SIRT3.

细胞定位 Mitochondrion.

图片

靶标



Western blot - Anti-IDH2 antibody [EPR7577] (ab131263)

All lanes : Anti-IDH2 antibody [EPR7577] (ab131263) at 1/1000 dilution

Lane 1: Wild-type Jurkat cell lysate

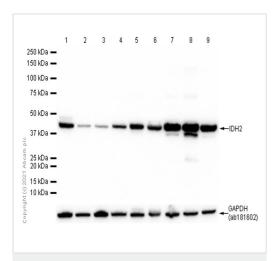
Lane 2: IDH2 knockout Jurkat cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 50 kDa **Observed band size:** 48 kDa

False colour image of Western blot: Anti-IDH2 antibody [EPR7577] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab131263 was shown to bind specifically to IDH2. A band was observed at 48 kDa in wild-type Jurkat cell lysates with no signal observed at this size in IDH2 knockout cell line ab282331 (knockout cell lysate ab283148). To generate this image, wild-type and IDH2 knockout Jurkat cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3% milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preabsorbed (ab216776) at 1/20000 dilution.



Western blot - Anti-IDH2 antibody [EPR7577] (ab131263)

Lanes 1-7: Anti-IDH2 antibody [EPR7577] (ab131263) at 1/5000 dilution (Purified)

Lanes 8-9: Anti-IDH2 antibody [EPR7577] (ab131263) at 1/5000 dilution

Lane 1 : MOLT-4 (Human lymphoblastic leukemia T lymphoblast) whole cell lysate

Lane 2: K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate

Lane 3: U-87 MG (Human glioblastoma-astrocytoma epithelial cell) whole cell lysate

Lane 4 : HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate

Lane 5: Mouse liver lysate

Lane 6: Rat liver lysate

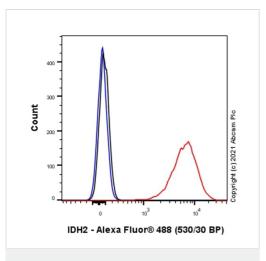
Lane 7 : Mouse kidney lysate
Lane 8 : Rat kidney lysate
Lane 9 : Rat stomach lysate

Lysates/proteins at 20 µg per lane.

Secondary

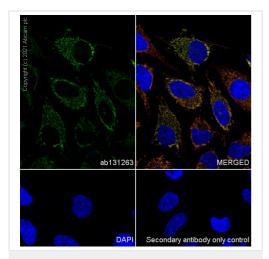
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 50 kDa



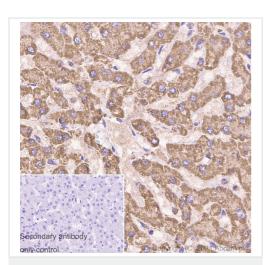
Flow Cytometry (Intracellular) - Anti-IDH2 antibody [EPR7577] (ab131263)

Flow Cytometry analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labelling IDH2 with Purified ab131263 at 1:20 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, <u>ab150081</u>) secondary antibody was used at 1:2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabelled control - Cell without incubation with primary antibody and secondary antibody (Blue).



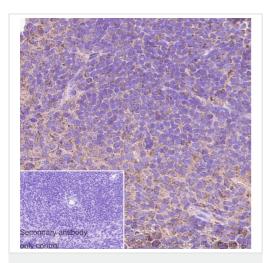
Immunocytochemistry/ Immunofluorescence - Anti-IDH2 antibody [EPR7577] (ab131263)

Immunocytochemistry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling IDH2 with Purified ab131263 at 1:1000 dilution (0.2 μg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 μg/ml). Goat anti rabbit lgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1:1000 (2 μg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



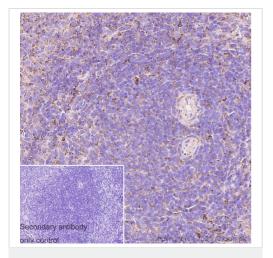
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IDH2 antibody [EPR7577] (ab131263)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue sections labeling IDH2 with Purified ab131263 at 1:100 (2.11 µg/ml). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



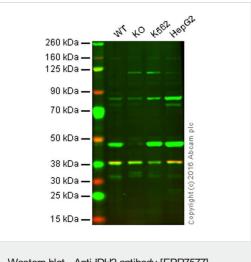
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IDH2 antibody [EPR7577] (ab131263)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse spleen tissue sections labeling IDH2 with Purified ab131263 at 1:100 (2.11 µg/ml). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IDH2 antibody [EPR7577] (ab131263)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat spleen tissue sections labeling IDH2 with Purified ab131263 at 1:100 (2.11 µg/ml). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-IDH2 antibody [EPR7577] (ab131263)

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

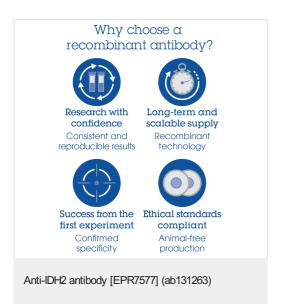
Lane 2: IDH2 knockout HAP1 cell lysate (20 µg)

Lane 3: K562 cell lysate (20 µg)

Lane 4: HepG2 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab131263 observed at 48 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab131263 was shown to recognize IDH2 when IDH2 knockout samples were used, along with additional cross-reactive bands. Wild-type and IDH2 knockout samples were subjected to SDS-PAGE. ab131263 and <u>ab8245</u> (loading control to GAPDH) were both diluted 1/10 000 and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



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