abcam

Product datasheet

Anti-GAPDH antibody [mAbcam 9484] - Loading Control ab9484

★★★★★ <u>56 Abreviews</u> <u>821 References</u> 5 图像

概述

产品名称 Anti-GAPDH抗体[mAbcam 9484] - Loading Control

描述 小鼠单克隆抗体[mAbcam 9484] to GAPDH - Loading Control

宿主 Mouse

特异性 In western blot, this product typically gives a lower signal in rat lysates compared to human and

mouse lysates.

经测试应用 **适用于:** WB, IHC-P

种属反应性 与反应: Mouse, Rat, Chicken, Cow, Human, Pig, Xenopus laevis, Chinese hamster

预测可用于: Rabbit, Dog, Cynomolgus monkey _____

免疫原 Full length native protein (purified). This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: A431, Jurkat, HEK293, HeLa, NIH 3T3, PC-12, EBTr and CHO cell lysates; Rat brain,

chicken and pig liver and Xenopus laevis embryo tissue lysates. IHC-P: Human liver tissue.

常规说明 For Western blotting, do not use milk for blocking. Our labs have extensively tested the blocking

conditions for this antibody and recommend using 5% BSA for 1 hour. The comparison data is

shown in the images section.

This antibody clone [mAbcam 9484] is manufactured by Abcam.

If you require this antibody in a particular buffer formulation or a particular conjugate for your experiments, please contact **orders@abcam.com** or you can find further information **here**.

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

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 or -

80°C. Avoid freeze / thaw cycle.

1

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine

纯**度** IgG fraction

克隆编号 mAbcam 9484

骨髓瘤 Sp2/0-Ag14

同种型 lgG2b 轻链类型 kappa

应用

克隆

The Abpromise guarantee Abpromise™承诺保证使用ab9484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。

单**克隆**

应用	Ab评论	说明
WB	★★★★ (53)	Use a concentration of 0.1 - 1 μ g/ml. Predicted molecular weight: 36 kDa. Do not block with milk. Block with 5% BSA for 1 hour. Our labs have thoroughly investigated the blocking conditions for this antibody. We found that milk significantly decreases the signal and is therefore not a suitable blocking agent for this antibody (see images).
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

靶标	
功能	Has both glyceraldehyde-3-phosphate dehydrogenase and nitrosylase activities, thereby playing a role in glycolysis and nuclear functions, respectively. Participates in nuclear events including transcription, RNA transport, DNA replication and apoptosis. Nuclear functions are probably due to the nitrosylase activity that mediates cysteine S-nitrosylation of nuclear target proteins such as SIRT1, HDAC2 and PRKDC (By similarity). Glyceraldehyde-3-phosphate dehydrogenase is a key enzyme in glycolysis that catalyzes the first step of the pathway by converting D-glyceraldehyde 3-phosphate (G3P) into 3-phospho-D-glyceroyl phosphate.
通路	Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 1/5.
序列相似性	Belongs to the glyceraldehyde-3-phosphate dehydrogenase family.
翻译后修饰	S-nitrosylation of Cys-152 leads to interaction with SIAH1, followed by translocation to the nucleus. ISGylated.
细胞定位	Cytoplasm > cytosol. Nucleus. Cytoplasm > perinuclear region. Membrane. Translocates to the nucleus following S-nitrosylation and interaction with SIAH1, which contains a nuclear localization

signal (By similarity). Postnuclear and Perinuclear regions.



Western blot - Anti-GAPDH antibody [mAbcam 9484] - Loading Control (ab9484)

All lanes : Anti-GAPDH antibody [mAbcam 9484] - Loading Control (ab9484) at 1 μ g/ml

Lane 1: HeLa Whole Cell Lysate
Lane 2: NIH 3T3 Whole Cell Lysate
Lane 3: PC12 Whole Cell Lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/5000 dilution

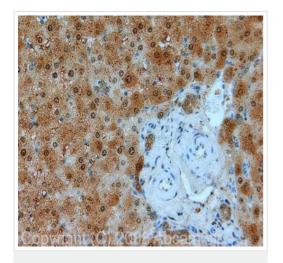
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 36 kDa

Exposure time: 1 minute

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab9484 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GAPDH antibody
[mAbcam 9484] - Loading Control (ab9484)

IHC image of GAPDH staining in human liver FFPE section, performed on a Bond TM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab9484, 5µg/ml, for 8 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Western blot - Anti-GAPDH antibody [mAbcam 9484] - Loading Control (ab9484)

All lanes : Anti-GAPDH antibody [mAbcam 9484] - Loading Control (ab9484) at 1/5000 dilution

Lane 1: Hela whole cell (Human)

Lane 2: 3T3 cell (Mouse)

Lane 3: Rat brain

Lane 4: Xenopus laevis embryo

Lane 5: Chicken Liver

Lane 6: EBTr cell (Cow)

Lane 7: CHO cell (Chinese hamster)

Lane 8: Pig liver

Secondary

All lanes: Rabbit Anti-Mouse IgG H&L (HRP) (ab6728) at 1/5000

dilution

Performed under reducing conditions.

Predicted band size: 36 kDa Observed band size: 40 kDa

Exposure time: 10 seconds

The membrane was blocked in 5% BSA in TBST for 1 hour, then incubated for 1 hour in primary antibody diluted in TBST.



Western blot - Anti-GAPDH antibody [mAbcam 9484] - Loading Control (ab9484)

Lanes 1-5: Anti-GAPDH antibody [mAbcam 9484] - Loading Control (ab9484) at 1/1000 dilution (Blocked in 5% milk)

Lanes 6-10: Anti-GAPDH antibody [mAbcam 9484] - Loading Control (ab9484) at 1/1000 dilution (Blocked in 5% BSA)

Lanes 1 & 6 : HeLa (Human epithelial carcinoma cell line) Nuclear Lysate

Lanes 2 & 7: HeLa (Human epithelial carcinoma cell line) Whole

Cell Lysate

Lanes 3 & 8 : A-431 whole cell lysate (<u>ab7909</u>)
Lanes 4 & 9 : Jurkat whole cell lysate (<u>ab7899</u>)

Lanes 5 & 10: HEK-293 whole cell lysate (ab7902)

Lysates/proteins at 20 µg per lane.

Secondary

Lanes 1-5: Goat anti-Mouse (HRP conjugated) at 1/5000 dilutionLanes 6-10: Goat anti-Mouse (HRP conjugated) at 1/5000 dilution

Predicted band size: 36 kDa **Observed band size:** 40 kDa

The membrane 1-5 was blocked in 5% milk (1 hour). The membrane 6-10 was blocked in 5% BSA (1 hour). Milk is not a suitable blocking agent and significantly decreases the signal on the membrane.

Western blot - Anti-GAPDH antibody [mAbcam 9484] - Loading Control (ab9484)

Anti-GAPDH antibody [mAbcam 9484] - Loading Control (ab9484) at 0.5 µg/ml + HeLa cell lysate

Secondary

Goat Anti-Mouse IgG H&L (HRP) (ab6789) at 1/5000 dilution

Developed using the ECL technique.

Performed under non-reducing conditions.

Predicted band size: 36 kDa

Exposure time: 30 seconds

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