# abcam

### Product datasheet

# Anti-GAPDH antibody [6C5] - Loading Control ab8245

★★★★★ 100 Abreviews 4366 References 6 图像

概述

产品名称 Anti-GAPDH抗体[6C5] - Loading Control

描述 小鼠单克隆抗体[6C5] to GAPDH - Loading Control

**宿主** Mouse

特异性 This GAPDH antibody can be used as a loading control antibody. GAPDH is a 146 kDa tetramer

composed of four 30-40 kDa subunits. There is no cross-reaction with GAPDH from yeast. Preliminary data indicates that the GAPDH antibody- loading control ab8245 recognizes the monomer (36 kDa) and also the dimer forms of GAPDH, but not the tetrameric form of the protein.

经测试应用 适用于: WB, ICC/IF

种属反应性 与反应: Mouse, Rat, Human

预测可用于: Horse, Chicken, Guinea pig, Hamster, Cat, Dog, Pig, Xenopus laevis, Fish,

cerevisiae

免疫原 Full length native protein (purified) corresponding to GAPDH.

Database link: P46406

阳性对照 ICC/IF: HeLa cells, NIH3T3 cells, SV40LT-SMC cells. WB: HeLa, A431, Jurkat, HEK-293, Raji

whole cell lysate.

常规说明 This product switched from ascites to tissue culture supernatant on 31 July 2017. Lot numbers

higher than [GR291713] will be from tissue culture supernatant.

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: 0.09% Sodium azide

Constituent: PBS

纯**度** Protein A purified

纯**化**说明 Chromatography on protein A Sepharose

 克隆
 单克隆

 克隆编号
 6C5

 骨髓瘤
 Sp2/0

 同种型
 lgG1

#### 应用

### The Abpromise guarantee Abpromise™承诺保证使用ab8245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>(96)</u>	1/500 - 1/10000. Detects a band of approximately 36 kDa (predicted molecular weight: 40.2 kDa).
ICC/IF	*** <u>*</u> (1)	Use a concentration of 1 - 5 μg/ml.

#### 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.

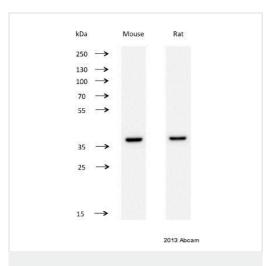
Soylate

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.

#### 图片



Western blot - Anti-GAPDH antibody [6C5] - Loading Control (ab8245)

This image is courtesy of an anonymous Abreview

All lanes: Anti-GAPDH antibody [6C5] - Loading Control (ab8245)

Lane 1: Mouse hippocampus whole cell lysate

Lane 2: Rat hippocampus whole cell lysate

Lysates/proteins at 20 µg per lane.

## Secondary

All lanes: HRP-conjugated Rabbit anti-mouse at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 40.2 kDa **Observed band size:** 36 kDa

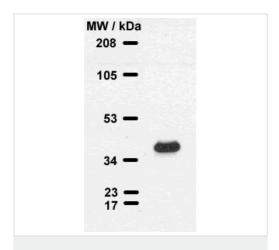
Exposure time: 10 seconds

ab8245 ab202272

Immunocytochemistry/ Immunofluorescence - Anti-GAPDH antibody [6C5] - Loading Control (ab8245) ab8245 staining GAPDH in SV40LT-SMC (Rat SV40-transfected aorta smooth cell line) cells.

The cells were fixed with 4% formaldehyde (10 minutes), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1 hour. The cells were then incubated with ab8245 at 5µg/ml and ab202272 at 1/250 overnight at +4°C, followed by a further incubation at room temperature for 1h with Goat Anti-Mouse IgG H&L (Alexa Fluor<sup>®</sup> 488) preadsorbed (ab150117) (shown in green). Nuclear DNA was labeled in blue with DAPI.

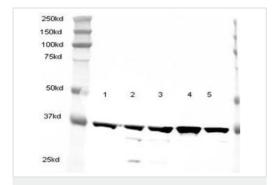
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Western blot - Anti-GAPDH antibody [6C5] - Loading Control (ab8245)

Anti-GAPDH antibody [6C5] - Loading Control (ab8245) at 10  $\mu$ g/ml + Raji (Human Burkitt's lymphoma cell line) whole cell lysate at 20  $\mu$ g

Predicted band size: 40.2 kDa



Western blot - Anti-GAPDH antibody [6C5] - Loading Control (ab8245)

**All lanes :** Anti-GAPDH antibody [6C5] - Loading Control (ab8245) at  $2.5~\mu g/ml$ 

**Lane 1 :** HeLa (Human epithelial cell line from cervix adenocarcinoma) Nuclear

**Lane 2 :** HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 3: A431 (Human epidermoid carcinoma cell line) cell lysate

Lane 4: Jurkat (Human T cell leukemia cell line from peripheral
blood) cell lysate

**Lane 5 :** HEK-293 (Human epithelial cell line from embryonic kidney) cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

All lanes: Alexa Fluor anti-mouse at 1/5000 dilution

Performed under reducing conditions.

**Predicted band size:** 40.2 kDa **Observed band size:** 37 kDa

Fluorescence detection of secondary antibody.

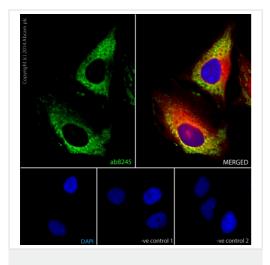
ab8245 ab202272s

Immunocytochemistry/ Immunofluorescence - Anti-GAPDH antibody [6C5] - Loading Control (ab8245)

ab8245 staining GAPDH in NIH/3T3 (Mouse embryo fibroblast cell line) cells.

The cells were fixed with 4% formaldehyde (10 minutes) and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1 hour. The cells were then incubated with ab8245 at 1 µg/ml and ab202272 at 1/250 overnight at +4°C, followed by a further incubation at room temperature for 1 hour with Goat Anti-Mouse IgG H&L (Alexa Fluor<sup>®</sup> 488) preadsorbed (ab150117) (shown in green). Nuclear DNA was labeled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Immunocytochemistry/ Immunofluorescence - Anti-GAPDH antibody [6C5] - Loading Control (ab8245)

ab8245 staining GAPDH in HeLa (Human epithelial cell line from cervix adenocarcinoma) cells.

The cells were fixed with 100% methanol (5 minutes) and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1 hour. The cells were then incubated with ab8245 at 5  $\mu$ g/ml and ab6046 at 1  $\mu$ g/ml overnight at +4°C, followed by a further incubation at room temperature for 1 hour with Goat Anti-Mouse lgG H&L (Alexa Fluor® 488) preadsorbed (ab150117) at 2  $\mu$ g/ml (shown in green) and Goat Anti-Rabbit lgG H&L (Alexa Fluor® 594) preadsorbed (ab150088) at 2  $\mu$ g/ml (shown in pseudo color red). Nuclear DNA was labeled in blue with DAPI.

**Negative controls:** 1– Rabbit primary antibody and anti-mouse secondary antibody; 2 – Mouse primary antibody and anti-rabbit secondary antibody. Controls 1 and 2 indicate that there is no unspecific reaction between primary and secondary antibodies used.

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