abcam

Product datasheet

# HRP Anti-GAPDH antibody - Loading Control ab9385

11 Abreviews 93 References 2 Images

## Overview

| | |
|---|---|
| **Product name** | HRP Anti-GAPDH antibody - Loading Control |
| **Description** | HRP Rabbit polyclonal to GAPDH - Loading Control |
| **Host species** | Rabbit |
| **Conjugation** | HRP |
| **Tested applications** | **Suitable for:** WB |
| **Species reactivity** | **Reacts with:** Human<br>**Predicted to work with:** Mouse, Rat, Cow, Saccharomyces cerevisiae, Xenopus laevis |
| **Immunogen** | Full length native protein (purified) corresponding to Human GAPDH. |
| **Positive control** | This antibody gave a positive signal in the following whole cell lysates: HeLa; Jurkat; A431; Hek293. |
| **General notes** | 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.<br>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 |

## Properties

| | |
|---|---|
| **Form** | Liquid |
| **Storage instructions** | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Store In the Dark. |
| **Storage buffer** | Preservative: 0.1% 10% Proclin 300 Solution<br>Constituents: PBS, 30% Glycerol, 1% BSA |
| **Purity** | Protein A purified |
| **Primary antibody notes** | This antibody is the HRP conjugated version of **ab9485**, for more convenient use as a loading control antibody. |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab9385 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|---|---|---|
| **WB** | ★★★★☆ **(11)** | 1/5000. Detects a band of approximately 38 kDa (predicted molecular weight: 36 kDa). Milk blocking may cause 'no bands' problem. Please try BSA as well. |

## Target

**Function** 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.

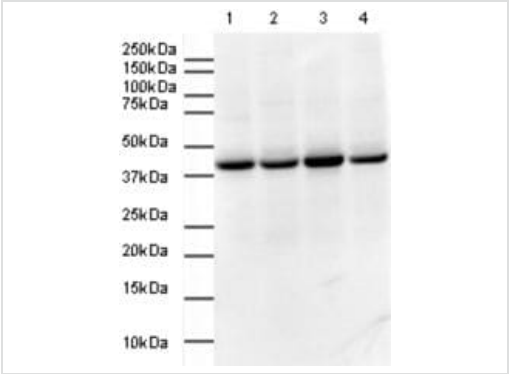
**Pathway** Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 1/5.

**Sequence similarities** Belongs to the glyceraldehyde-3-phosphate dehydrogenase family.

**Post-translational modifications** S-nitrosylation of Cys-152 leads to interaction with SIAH1, followed by translocation to the nucleus.
lSGylated.

**Cellular localization** 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.

## Images




Western blot - HRP Anti-GAPDH antibody - Loading Control (ab9385)

**All lanes :** HRP Anti-GAPDH antibody - Loading Control (ab9385) at 1 µg/ml

**Lane 1 :** HeLa cell lysate
**Lane 2 :** A431 cell lysate
**Lane 3 :** Jurkat cell lysate
**Lane 4 :** 293 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 36 kDa

**Observed band size:** 38 kDa

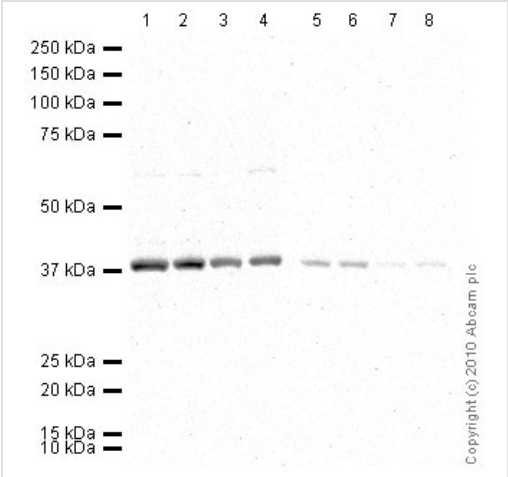
**Exposure time:** 1 minute

Lane 1 - 4 : GAPDH antibody - Loading Control (ab9385) at 1 ug/ml

Lane 1 : HeLa cell lysate at 20 ug
Lane 2 : A431 cell lysate at 20 ug
Lane 3 : Jurkat cell lysate at 20 ug
Lane 4 : 293 cell lysate at 20 ug

Performed under reducing conditions.

Exposure time : 1 minute




Western blot - HRP Anti-GAPDH antibody - Loading Control (ab9385)

**Lanes 1-4 :** HRP Anti-GAPDH antibody - Loading Control (ab9385) at 1/5000 dilution ((Blocked in 5% BSA))
**Lanes 5-8 :** HRP Anti-GAPDH antibody - Loading Control (ab9385) at 1/5000 dilution ((Blocked in 5% MILK))

**Lanes 1 & 5 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate (**ab27252**)
**Lanes 2 & 6 :** Jurkat (Human) Whole Cell Lysate (**ab52254**)
**Lanes 3 & 7 :** A-431 whole cell lysate (**ab7909**)
**Lanes 4 & 8 :** HEK-293 whole cell lysate (**ab7902**)

Lysates/proteins at 10 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 36 kDa

The membrane 1-4 was blocked in 5% BSA (1 hour). The membrane 5-8 was blocked in 5% MILK (1 hour). Abcam routinely uses 5% BSA to block, however following recent customer feedback our labs investigated the effect of 5% milk blocking. We can now confirm that milk is not a suitable blocking agent for this antibody and significantly decreases the signal on the membrane.

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