abcam

Product datasheet

Anti-GAPDH antibody - Loading Control ab70700

1 References 2 Images

Overview

Product name	Anti-GAPDH antibody - Loading Control
Description	Rabbit polyclonal to GAPDH - Loading Control
Host species	Rabbit
Specificity	We have data to indicate that this antibody may not cross react with Human. However, this has not been conclusively tested and expression levels may vary in certain cell lines/tissues.
Tested applications	**Suitable for:** IHC-P, WB
Species reactivity	**Reacts with:** Mouse **Predicted to work with:** Rat, Gerbil, Chinese hamster
Immunogen	Synthetic peptide within Mouse GAPDH aa 300-335 (C terminal). The exact sequence is proprietary. Database link: **P16858**
Positive control	Whole cell lysate from mouse NIH3T3 cells.
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. 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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 6.8 Preservative: 0.09% Sodium azide Constituents: 0.1% BSA, Tris buffered saline
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab70700 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
IHC-P		1/200 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/2000 - 1/10000. Detects a band of approximately 38 kDa (predicted molecular weight: 36 kDa).

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.

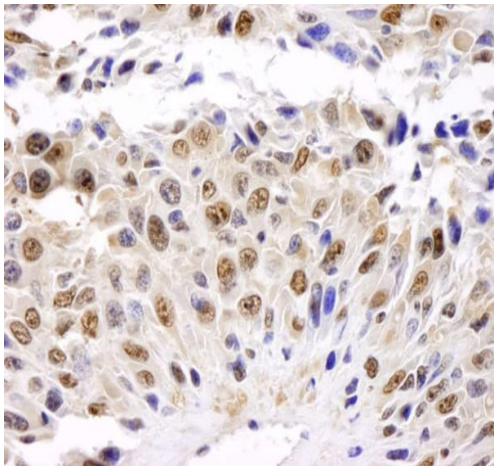
Pathway Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 1/5.

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.
ISGylated.

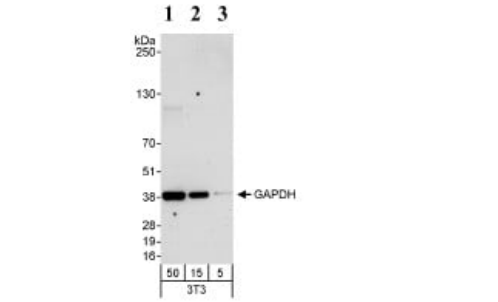
Cellular localization Cytoplasm > cytosol. Nucleus. Cytoplasm > perinuclear region. Membrane. Translocates to the nucleus following S-nitrosylation and interaction with SIAH1, which contains a nuclear localization signal (By similarity). Postnuclear and Perinuclear regions.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GAPDH antibody - Loading Control (ab70700)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse squamous cell carcinoma tissue labelling GAPDH with ab70700 at 1/200 (1µg/ml). Detection: DAB.



Western blot - Anti-GAPDH antibody - Loading Control (ab70700)

All lanes : Anti-GAPDH antibody - Loading Control (ab70700) at 0.04 µg/ml

Lane 1 : Whole cell lysate from mouse NIH3T3 cells. at 50 µg
Lane 2 : Whole cell lysate from mouse NIH3T3 cells. at 15 µg
Lane 3 : Whole cell lysate from mouse NIH3T3 cells. at 5 µg

Predicted band size: 36 kDa
Observed band size: 38 kDa

Exposure time: 30 seconds

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors