# abcam

## Product datasheet

# Alexa Fluor® 647 Anti-GAPDH antibody [3E8AD9] ab198105

### 1 Image

#### Overview

Product name Alexa Fluor® 647 Anti-GAPDH antibody [3E8AD9]

**Description** Alexa Fluor® 647 Mouse monoclonal [3E8AD9] to GAPDH

Host species Mouse

**Conjugation** Alexa Fluor® 647. Ex: 652nm, Em: 668nm

Tested applications
Suitable for: ICC/IF
Species reactivity
Reacts with: Human

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

Positive control ICC/IF: HeLa cells.

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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.

Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or

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 pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 1% BSA, PBS, 30% Glycerol (glycerin, glycerine)

Purification notes <u>ab110305</u> was produced in vitro using hybridomas grown in serum-free medium, and then

purified by biochemical fractionation. Purity: >95% by SDS-PAGE.

Clonality Monoclonal
Clone number 3E8AD9
Isotype IgG2b
Light chain type kappa

#### **Applications**

**Target** 

The Abpromise guarantee Our Abpromise guarantee covers the use of ab198105 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                                                                                                                   |
|-------------|-----------|-------------------------------------------------------------------------------------------------------------------------|
| ICC/IF      |           | 1/100. This product gave a positive signal in HeLa cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min). |

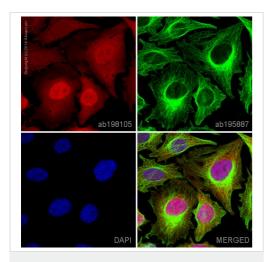
| Function                         | Has both glyceraldehyde-3-phosphate dehydrogenase and nitrosylase activities, thereby playing a role in glycolysis and nuclear functions, respectively. Participates in nuclear events including transcription, RNA transport, DNA replication and apoptosis. Nuclear functions 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

signal (By similarity). Postnuclear and Perinuclear regions.

Cytoplasm > cytosol. Nucleus. Cytoplasm > perinuclear region. Membrane. Translocates to the nucleus following S-nitrosylation and interaction with SIAH1, which contains a nuclear localization

#### **Images**

**Cellular localization** 



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-GAPDH antibody [3E8AD9] (ab198105)

ab198105 staining GAPDH in HeLa cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab198105 at a 1/100 dilution (shown in red) and <a href="mailto:ab195887">ab195887</a>, Mouse monoclonal to alpha Tubulin (Alexa Fluor<sup>®</sup> 488), at a 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

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

This product also gave a positive signal under the same testing conditions in HeLa cells fixed with 100% methanol (5 min).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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