

GAPDH Mouse mAb

Catalog No.: AC002 294 Publications

Basic Information

Catalog No.

AC002

Observed MW

36kDa

Calculated MW

31kDa/36kDa

Category

Loading control antibody

Applications

WB, IHC, IF

Cross-Reactivity

Human, Mouse, Rat

Recommended Dilutions

WB	1:5000 - 1:20000
IHC	1:50 - 1:200
IF	1:50 - 1:200

Contact

 | www.abclonal.com

Background

This gene encodes a member of the glyceraldehyde-3-phosphate dehydrogenase protein family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. The product of this gene catalyzes an important energy-yielding step in carbohydrate metabolism, the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate in the presence of inorganic phosphate and nicotinamide adenine dinucleotide (NAD). The encoded protein has additionally been identified to have uracil DNA glycosylase activity in the nucleus. Also, this protein contains a peptide that has antimicrobial activity against *E. coli*, *P. aeruginosa*, and *C. albicans*. Studies of a similar protein in mouse have assigned a variety of additional functions including nitrosylation of nuclear proteins, the regulation of mRNA stability, and acting as a transferrin receptor on the cell surface of macrophage. Many pseudogenes similar to this locus are present in the human genome. Alternative splicing results in multiple transcript variants.

Immunogen Information

Gene ID

2597

Swiss Prot

P04406

Immunogen

Recombinant protein of human GAPDH

Synonyms

G3PD;GAPD;HEL-S-162eP;GAPDH

Product Information

Source

Mouse

Isotype

IgG

Purification

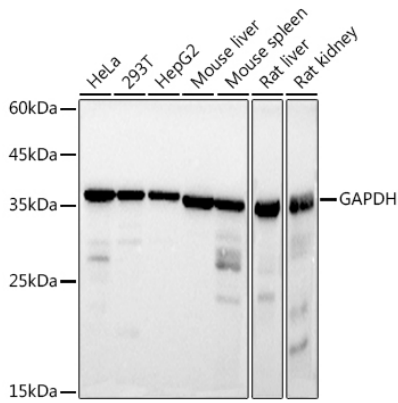
Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of extracts of various cell lines, using GAPDH antibody (AC002) at 1:10000 dilution.

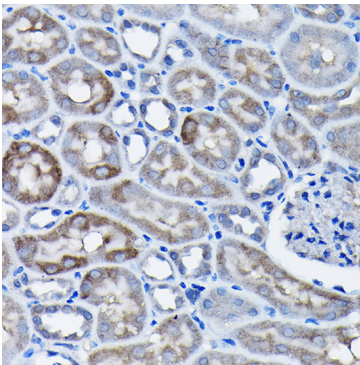
Secondary antibody: HRP Goat Anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution.

Lysates/proteins: 25ug per lane.

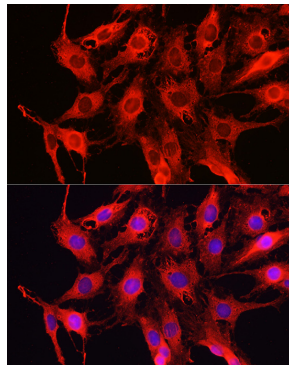
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

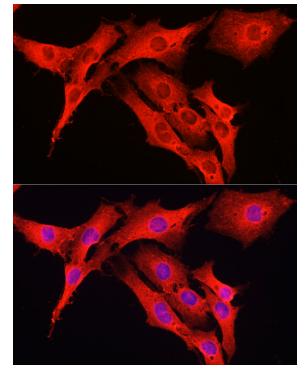
Exposure time: 1s.



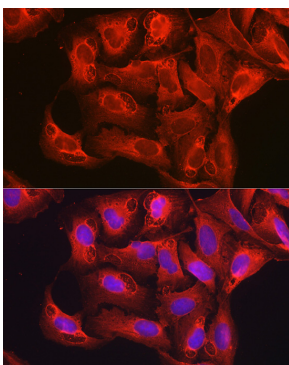
Immunohistochemistry of paraffin-embedded rat kidney using GAPDH Mouse mAb (AC002) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunofluorescence analysis of C6 cells using GAPDH Mouse mAb (AC002) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH-3T3 cells using GAPDH Mouse mAb (AC002) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U-2 OS cells using GAPDH Mouse mAb (AC002) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.