

AC002

Leader in Biomolecular Solutions for Life Science



GAPDH Mouse mAb

Catalog No.: AC002

836 Publications

Basic Information

Observed MW

36kDa

Calculated MW

36kDa

Category

Monoclonal Antibody

Applications

WB,IHC-P,IF/ICC,ELISA

Cross-Reactivity

Human,Mouse,Rat

CloneNo number

AMC0062R

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.

Recommended Dilutions

WB 1:5000 - 1:50000**IHC-P** 1:50 - 1:200**IF/ICC** 1:50 - 1:200

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

2597

Swiss Prot

P04406

Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms

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

Product Information

Source

Mouse

Isotype

IgG2b,Kappa

Purification

Affinity purification

Storage

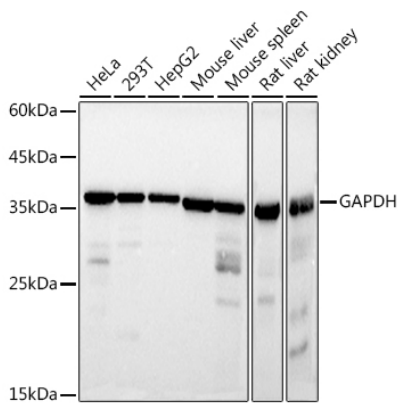
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

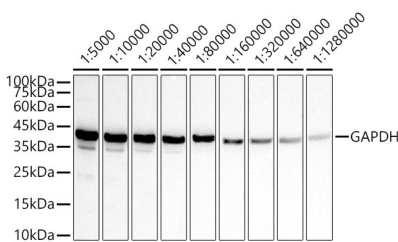
Contact

www.abclonal.com

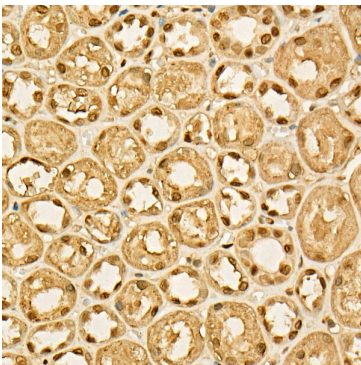
Validation Data



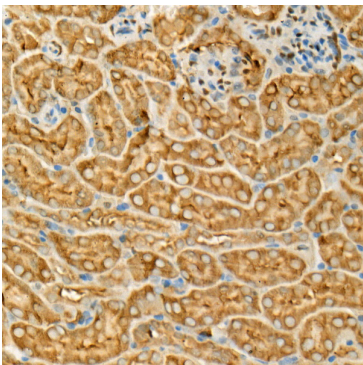
Western blot analysis of various lysates using GAPDH Mouse mAb (AC002) at 1:10000 dilution incubated overnight at 4°C.
Secondary antibody: HRP-conjugated Goat anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 1s.



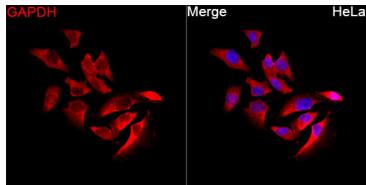
Western blot analysis of lysates from HeLa cells using GAPDH Mouse mAb (AC002) at 1:5000-1:1280000 dilution incubated overnight at 4°C.
Secondary antibody: HRP-conjugated Goat anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020)
Exposure time: 20 s.



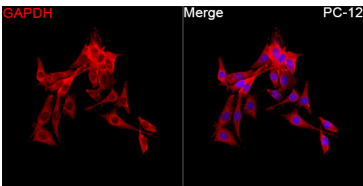
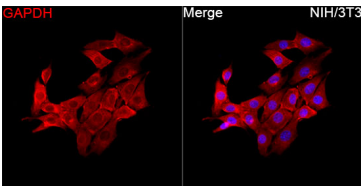
Immunohistochemistry analysis of paraffin-embedded Human kidney using GAPDH Mouse mAb (AC002) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse kidney using GAPDH Mouse mAb (AC002) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunofluorescence analysis of HeLa cells using GAPDH Mouse mAb (AC002) at a dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Validation Data

Immunofluorescence analysis of NIH/3T3 cells using GAPDH Mouse mAb (AC002) at a dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

Immunofluorescence analysis of PC-12 cells using GAPDH Mouse mAb (AC002) at a dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.