

# GAPDH Mouse mAb

Catalog No.: AC002 **330 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

<b>WB</b>	1:5000 - 1:20000
<b>IHC</b>	1:50 - 1:200
<b>IF</b>	1:50 - 1:200

## Contact

 | [www.abclonal.com](http://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

<b>Gene ID</b>	<b>Swiss Prot</b>
2597	P04406

**Immunogen**

Recombinant fusion protein containing a sequence corresponding to amino acids 1-335 of human GAPDH (P04406).

**Synonyms**

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

## Product Information

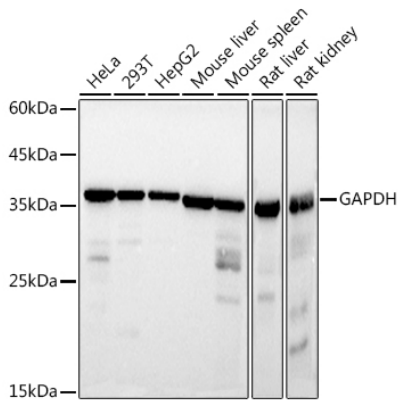
<b>Source</b>	<b>Isotype</b>	<b>Purification</b>
Mouse	IgG	Affinity purification

**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.

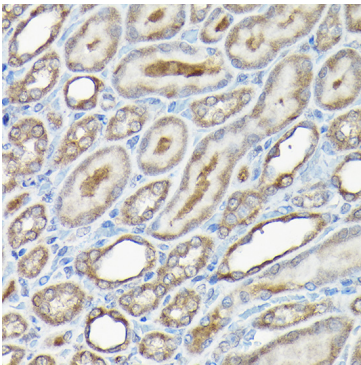
Secondary antibody: HRP Goat Anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution.

Lysates/proteins: 25ug per lane.

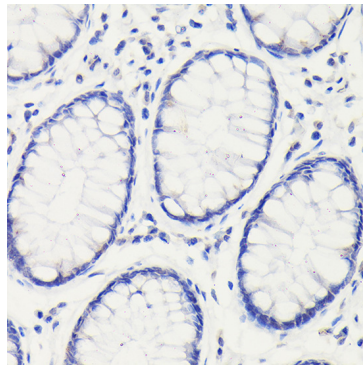
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

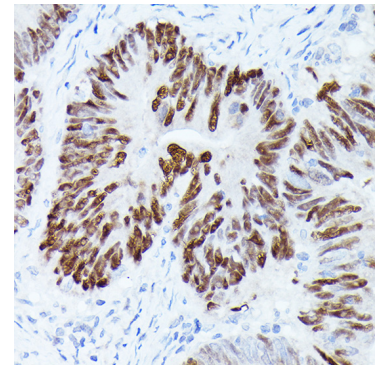
Exposure time: 1s.



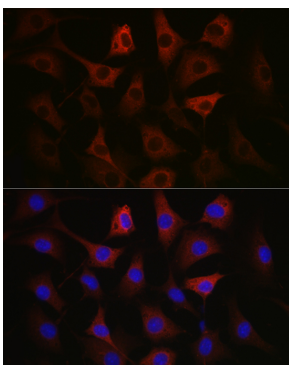
Immunohistochemistry of paraffin-embedded human liver cancer using GAPDH Mouse mAb (AC002) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry of paraffin-embedded mouse stomach 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.



Immunohistochemistry of paraffin-embedded rat lung 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 NIH/3T3 cells using GAPDH Mouse mAb (AC002) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.