

AC001

Leader in Biomolecular Solutions for Life Science



GAPDH Rabbit pAb

Catalog No.: AC001

407 Publications

Basic Information

Observed MW**Calculated MW**

36kDa

Category

Polyclonal Antibody

Applications

WB,IHC-P,IF/ICC,IP

Cross-Reactivity

Human,Mouse,Rat

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	1:10000 - 1:30000
IHC-P	1:50 - 1:200
IF/ICC	1:50 - 1:200
IP	0.5µg-4µg antibody for 200µg-400µg extracts of whole cells

Immunogen Information

Gene ID

2597

Swiss Prot

P04406

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-335 of human GAPDH (NP_002037.2).

Synonyms

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

Contact

www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

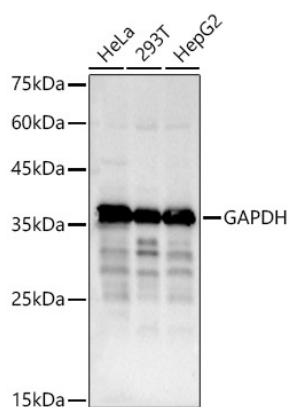
Affinity purification

Storage

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

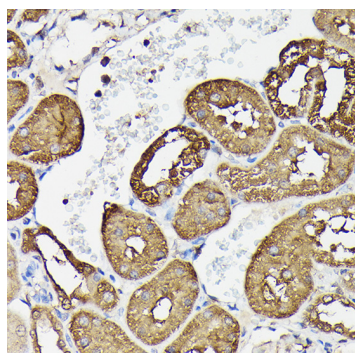
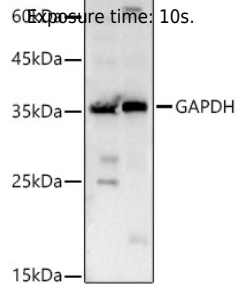
Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

Validation Data

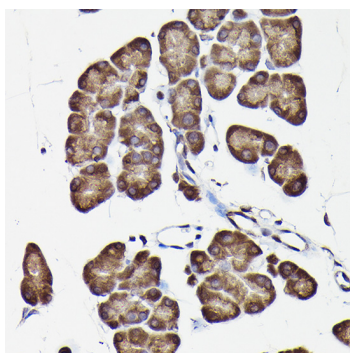


Western blot analysis of various lysates using GAPDH Rabbit pAb (AC001) at 1:30000 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 3s.

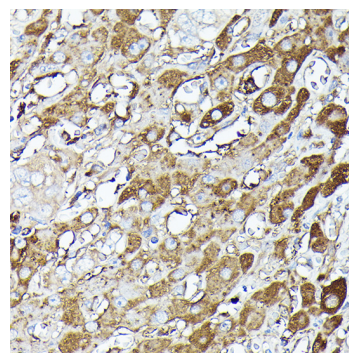
Western blot analysis of various lysates using GAPDH Rabbit pAb (AC001) at 1:30000 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 10s.



Immunohistochemistry analysis of GAPDH in paraffin-embedded rat kidney using GAPDH Rabbit pAb (AC001) 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.

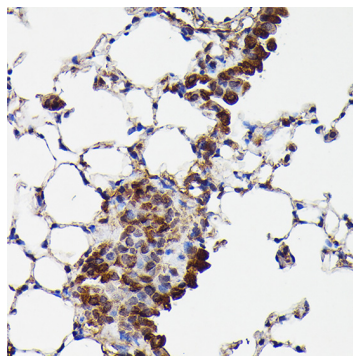


Immunohistochemistry analysis of GAPDH in paraffin-embedded rat pancreas using GAPDH Rabbit pAb (AC001) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

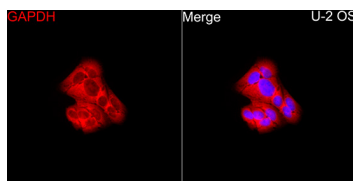


Immunohistochemistry analysis of GAPDH in paraffin-embedded human liver cancer using GAPDH Rabbit pAb (AC001) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

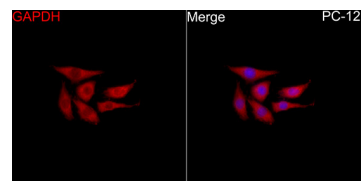
Validation Data



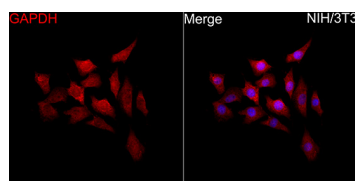
Immunohistochemistry analysis of GAPDH in paraffin-embedded mouse lung using GAPDH Rabbit pAb (AC001) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



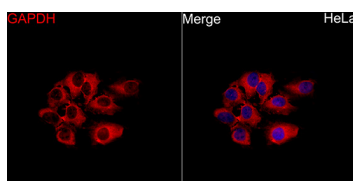
Immunofluorescence analysis of U-2 OS cells using GAPDH Rabbit pAb(AC001) at a dilution of 1:25 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



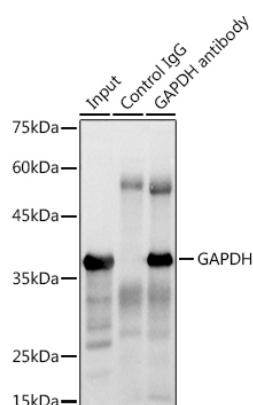
Immunofluorescence analysis of PC-12 cells using GAPDH Rabbit pAb(AC001) at a dilution of 1:25 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using GAPDH Rabbit pAb(AC001) at a dilution of 1:25 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HeLa cells using GAPDH Rabbit pAb(AC001) at a dilution of 1:25 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunoprecipitation analysis of 300 μ g extracts of HeLa cells using 3 μ g GAPDH antibody (AC001). Western blot was performed from the immunoprecipitate using GAPDH antibody (AC001) at a dilution of 1:20000.