GAPDH Rabbit pAb

Catalog No.: AC027 57 Publications



Basic Information

Observed MW

36kDa

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 1:2000 - 1:10000

IHC-P 1:50 - 1:200

IF/ICC 1:50 - 1:200

IP 0.5ug-4ug antibody for

200ug-400ug extracts

of whole cells

Immunogen Information

Gene IDSwiss Prot
2597
P04406

Immunogen

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

Synonyms

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

Contact

www.abclonal.com

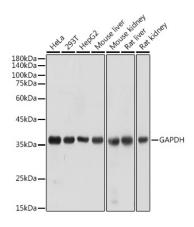
Product Information

SourceIsotypePurificationRabbitIgGAffinity 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.



Western blot analysis of various lysates using GAPDH Rabbit pAb (AC027) at 1:10000 dilution.

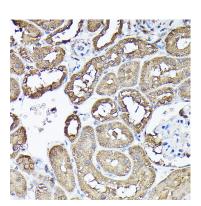
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

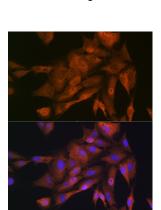
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

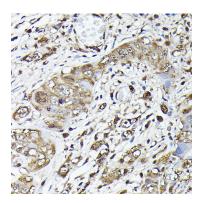
Exposure time: 1s.



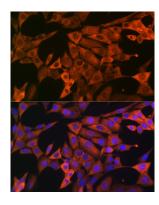
Immunohistochemistry analysis of paraffin-embedded Rat kidney using GAPDH Rabbit pAb (AC027) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



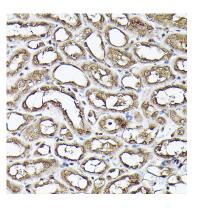
Immunofluorescence analysis of C6 cells using GAPDH Rabbit pAb (AC027) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



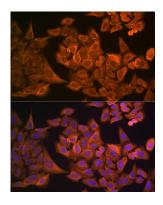
Immunohistochemistry analysis of paraffin-embedded Human liver cancer using GAPDH Rabbit pAb (AC027) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunofluorescence analysis of NIH-3T3 cells using GAPDH Rabbit pAb (AC027) at 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.



Immunohistochemistry analysis of paraffin-embedded Mouse kidney using GAPDH Rabbit pAb (AC027) 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 U-2 OS cells using GAPDH Rabbit pAb (AC027) at 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.