

# GAPDH Rabbit pAb

Catalog No.: AC027 **42 Publications**

## Basic Information

**Observed MW**

36kDa

**Calculated MW**

36kDa

**Category**

Loading control 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

<b>WB</b>	1:2000 - 1:10000
<b>IHC-P</b>	1:50 - 1:200
<b>IF/ICC</b>	1:50 - 1:200
<b>IP</b>	0.5ug-4ug antibody for 200ug-400ug extracts of whole cells

## 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 (NP\_002037.2).

**Synonyms**

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

## Contact

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

## Product Information

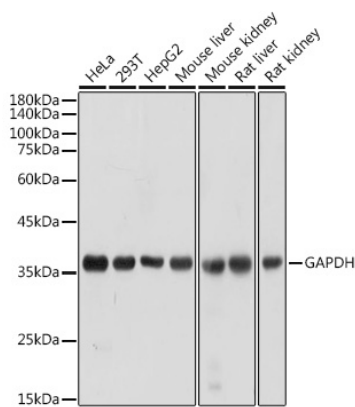
<b>Source</b>	<b>Isotype</b>	<b>Purification</b>
Rabbit	IgG	Affinity purification

**Storage**

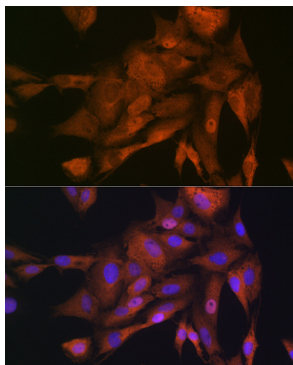
Store at -20°C. Avoid freeze / thaw cycles.

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

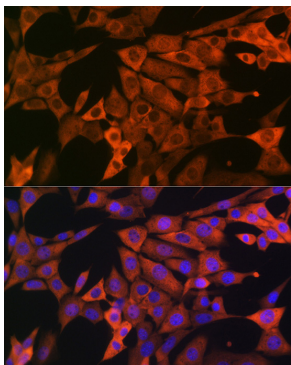
Validation Data



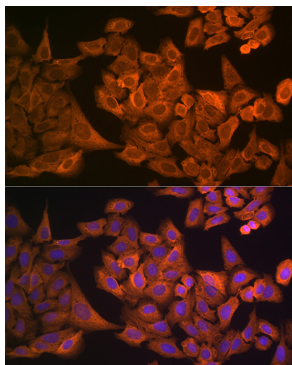
Western blot analysis of various lysates using GAPDH Rabbit pAb (AC027) at 1:10000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 1s.



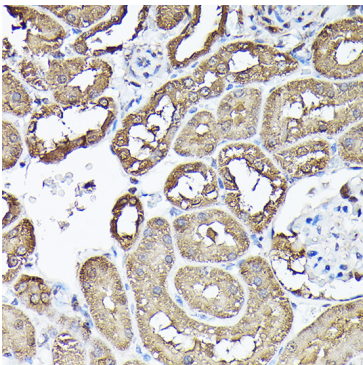
Immunofluorescence analysis of C6 cells using GAPDH Rabbit pAb (AC027) at dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



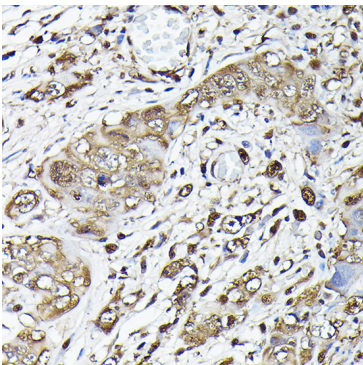
Immunofluorescence analysis of NIH-3T3 cells using GAPDH Rabbit pAb (AC027) at dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



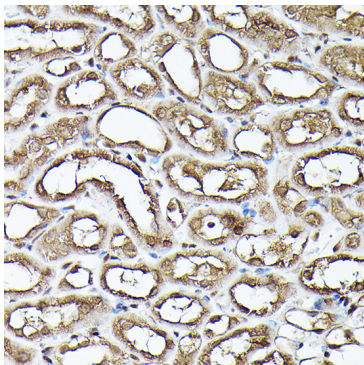
Immunofluorescence analysis of U-2 OS cells using GAPDH Rabbit pAb (AC027) at dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunohistochemistry analysis of GAPDH in paraffin-embedded rat kidney using GAPDH Rabbit pAb (AC027) 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 (AC027) 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 mouse kidney using GAPDH Rabbit pAb (AC027) 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.