

For Research Use Only

# GAPDH Monoclonal antibody

Catalog Number: 60004-1-Ig **2870 Publications**



## Basic Information

<b>Catalog Number:</b> 60004-1-Ig	<b>GenBank Accession Number:</b> BC004109	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150UL, Concentration: 1000 µg/ml by 2597 Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 2597	<b>CloneNo.:</b> 1E6D9
<b>Source:</b> Mouse	<b>Full Name:</b> glyceraldehyde-3-phosphate dehydrogenase	<b>Recommended Dilutions:</b> WB 1:20000-1:100000 IP 0.5-4.0 µg for IP and 1:2000-1:12000 for WB
<b>Isotype:</b> IgG2b	<b>Calculated MW:</b> 36 kDa	<b>IF 1:200-1:2000</b>
<b>Immunogen Catalog Number:</b> AG0766	<b>Observed MW:</b> 36 kDa	

## Applications

### Tested Applications:

FC, IF, IP, WB, ELISA

### Cited Applications:

IF, IHC, IP, WB

### Species Specificity:

human, mouse, rat, yeast, plant

### Cited Species:

A. flavus, azalea R. hainanense, beagle, Bovine, canine, carp, chicken, cow, Cynomorium songaricum Rupr, Cyprinus carpio

### Positive Controls:

**WB:** HeLa cells, soybean whole plant tissue, arabidopsis whole plant tissue, HepG2 cells, ROS1728 cells, pig brain tissue, zebrafish tissue, whole yeast cells, whole Nematode tissue, HEK-293 cells, HSC-T6 cells, PC-12 cells, NIH/3T3 cells, C2C12 cells, SP2/0 cells, rat brain tissue, mouse brain tissue

**IP:** HeLa Cells,

**IF:** Ethacrynic acid treated HeLa cells,

## Background Information

Glyceraldehyde-3-phosphate dehydrogenase (GAPDH) catalyzes the phosphorylation of glyceraldehyde-3-phosphate during glycolysis. GAPDH participates in nuclear events including transcription, binding RNA, RNA transportation, DNA replication, DNA repair and apoptosis. Being stably and constitutively expressed at high levels in most tissues and cells, GAPDH is considered a housekeeping protein. It is widely used as a control for RT-PCR and also loading control in electrophoresis and Western blotting. GAPDH is normally expressed in cellular cytoplasm or membrane, but can occasionally translocate to the nucleus after the addition of post-translational modifications such as S-nitrosylation. This antibody is raised against full length GAPDH of human origin. It can recognize the 36 kDa GAPDH protein in most cells/tissues. In addition, a band below 36 kDa can always be detected as the isoform or spliced product of GAPDH (PMID: 23885286, 23877755, 19368702). Please note that some physiological factors, such as hypoxia and diabetes, increase GAPDH expression in certain cell types. For murine tissue samples, conjugated mouse antibody HRP-60004 and rabbit antibody 10494-1-AP are preferable.

## Notable Publications

Author	Pubmed ID	Journal	Application
Mengru Xie	32999278	Int J Oral Sci	WB
Xiang-Yang Zeng	31568657	Cancer Med	WB
Chunca Gu	31570702	Cell Death Dis	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.1% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

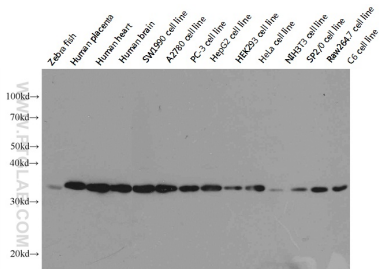
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

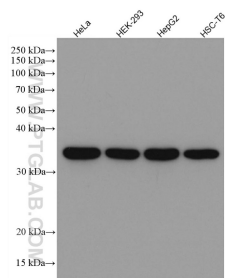
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

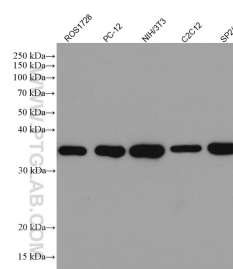
## Selected Validation Data



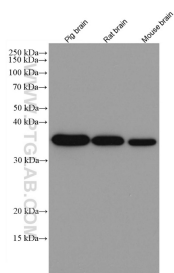
Western blot analysis of GAPDH in various tissues and cell lines using Proteintech antibody 60004-1-Ig at a dilution of 1:10000.



Various lysates were subjected to SDS PAGE followed by western blot with 60004-1-Ig (GAPDH antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.

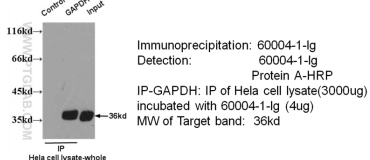


Various lysates were subjected to SDS PAGE followed by western blot with 60004-1-Ig (GAPDH antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.

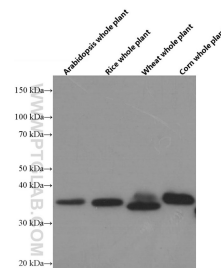


Various lysates were subjected to SDS PAGE followed by western blot with 60004-1-Ig (GAPDH antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.

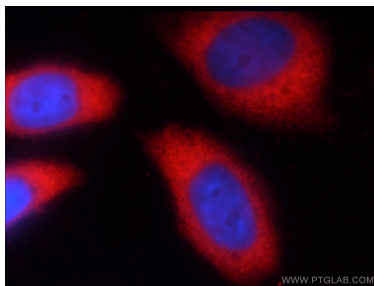
### IP & WB of 60004-1-Ig with HeLa Cell



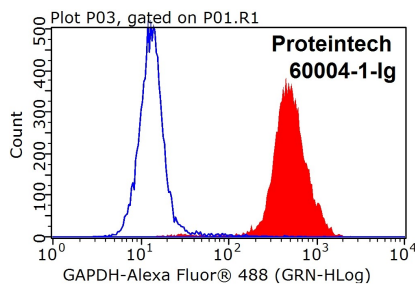
IP result of anti-GAPDH (60004-1-Ig for IP and Detection) with HeLa cell lysate.



arabidopsis, rice, wheat, corn whole plant tissue were subjected to SDS PAGE followed by western blot with 60004-1-Ig (GAPDH Antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of EA treated HeLa cells using 60004-1-Ig(GAPDH antibody) at dilution of 1:50 and Rhodamine-labeled goat anti-mouse IgG (red).



$1 \times 10^6$  HeLa cells were stained with 0.2ug GAPDH antibody (60004-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). FITC-Goat anti-Mouse IgG with dilution 1:100.