

GAPDH Polyclonal ANTIBODY

Catalog Number: 10494-1-AP

1106 Publications

Basic Information

Catalog Number:
10494-1-AP

Size:
50 µg/150 µl

Source:
Rabbit

Isotype:
IgG

Purification Method:
Antigen affinity purification

Immunogen Catalog Number:
AG0766

GenBank Accession Number:
BC004109

GeneID (NCBI):
2597

Full Name:
glyceraldehy de-3-phosphate dehy drogenase

Calculated MW:
36 kDa

Observed MW:
36 kDa

Recommended Dilutions:

WB 1:10000-1:40000

IP 0.5-4.0 ug for IP and 1:1000-1:6000 for WB

IHC 1:200-1:800

IF 1:20-1:200

Applications

Tested Applications:

FC, IF, IHC, IP, WB, ELISA

Cited Applications:

CoIP, IF, IHC, WB

Species Specificity:

human,mouse,rat,pig,arabidopsis ,corn

Cited Species:

C. elegans, cow, dog, hamster, human, Leeches,
monkey, mouse, mussel, Oriental river prawns

**Note: suggested antigen retrieval with TE
buffer pH 9.0; (*) Alternatively, antigen
retrieval may be performed with citrate
buffer pH 6.0**

Positive Controls:

WB : HeLa cells; HEK-293 cells, A549 cells, Raji
cells, HepG2 cells, PC-13 cells, K-562 cells, mouse
heart tissue, arabidopsis whole plant tissue, corn
whole plant tissue, mouse brain tissue, rat brain
tissue

IP : A549 cells;

IHC : human breast cancer tissue; human lung
cancer tissue

IF : HepG2 cells; HeLa cells

Background Information

Glyceraldehy de-3-phosphate dehy drogenase (GAPDH) catalyzes the phosphorylation of glyceraldehy de-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 (PMD: 23885286, 23877755, 19368702). Please note that some physiological factors, such as hypoxia and diabetes, increase GAPDH expression in certain cell types.

Notable Publications

Author	Pubmed ID	Journal	Application
Guomu Liu	26491285	Int J Nanomedicine	WB
Yanchun Chen	26550457	Am J Transl Res	WB
Zhongwei Xin	30267473	Thorac Cancer	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

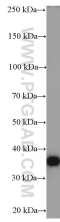
For technical support and original validation data for this product please contact:

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

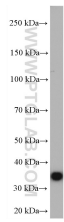
E: proteintech@ptglab.com
W: ptglab.com

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

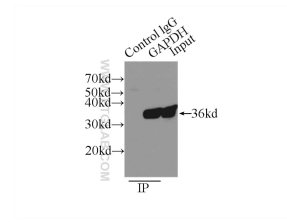
Selected Validation Data



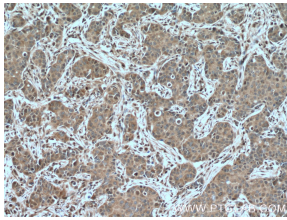
HEK-293 cells were subjected to SDS PAGE followed by western blot with 10494-1-AP (GAPDH antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours



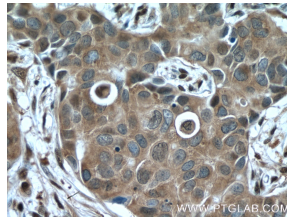
HeLa cells were subjected to SDS PAGE followed by western blot with 10494-1-AP (GAPDH antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours



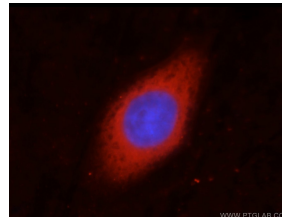
IP Result of anti-GAPDH (IP:10494-1-AP, 3ug; Detection: 10494-1-AP 1:3000) with A549 cells lysate 3500ug.



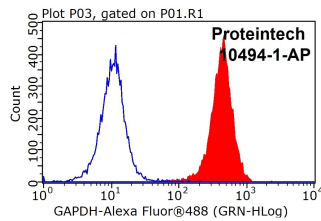
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10494-1-AP (GAPDH antibody) at dilution of 1:400 (under 10x lens) heat mediated antigen retrieved with Tris-EDTA buffer(pH9).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10494-1-AP (GAPDH antibody) at dilution of 1:400 (under 40x lens) heat mediated antigen retrieved with Tris-EDTA buffer(pH9).



Immunofluorescent analysis of HepG2 cells, using GAPDH antibody 10494-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



1X10⁶ HEK-293 cells were stained with .2ug GAPDH antibody (10494-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488 -Coat anti-Rabbit IgG with dilution 1:100.