

For Research Use Only

# GAPDH (Human Specific) Recombinant antibody

Catalog Number: 80570-1-RR

16 Publications



## Basic Information

<b>Catalog Number:</b> 80570-1-RR	<b>GenBank Accession Number:</b> BC004109	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul, Concentration: 400 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2597	<b>CloneNo.:</b> 2G21
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P04406	<b>Recommended Dilutions:</b> WB 1:2000-1:16000 IHC 1:400-1:1600 IF/ICC 1:200-1:800
<b>Isotype:</b> IgG	<b>Full Name:</b> glyceraldehyde-3-phosphate dehydrogenase	
<b>Immunogen Catalog Number:</b> AG0766	<b>Calculated MW:</b> 36 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b> WB : HeLa cells, HEK-293 cells, Jurkat cells, K-562 cells IHC : human liver cancer tissue, human lung tissue IF/ICC : HeLa cells,
<b>Cited Applications:</b> WB	
<b>Species Specificity:</b> Human	
<b>Cited Species:</b> human, mouse	

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

## 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. 80570-1-RR is human specific.

## Notable Publications

Author	Pubmed ID	Journal	Application
Lizong Wang	36173462	J Cancer Res Clin Oncol	WB
Guanli Zhang	36193555	J Biochem Mol Toxicol	WB
Zhi-Hu Zhao	35128373	Mater Today Bio	WB

## Storage

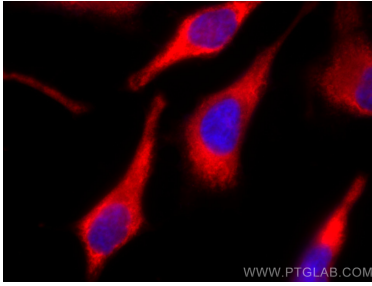
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

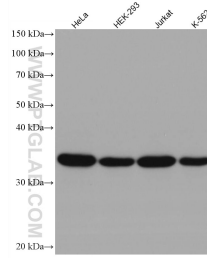
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

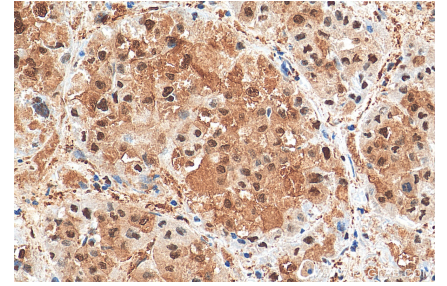
## Selected Validation Data



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using GAPDH (Human Specific) antibody (80570-1-RR, Clone: 2G21) at dilution of 1:400 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L).



Various lysates were subjected to SDS PAGE followed by western blot with 80570-1-RR (GAPDH antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 80570-1-RR (GAPDH (Human Specific) antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).