

For Research Use Only

# GAPDH Recombinant antibody, PBS Only (Detector)

Catalog Number: 81640-5-PBS



## Basic Information

Catalog Number: 81640-5-PBS	GenBank Accession Number: BC004109	Purification Method: Protein A purification
Size: 1mg/ml	GeneID (NCBI): 2597	CloneNo.: 1H18
Source: Rabbit	UNIPROT ID: P04406	
Isotype: IgG	Full Name: glyceraldehyde-3-phosphate dehydrogenase	
Immunogen Catalog Number: AG0766	Calculated MW: 36 kDa	
	Observed MW: 36 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## 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.

## Storage

**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS Only

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

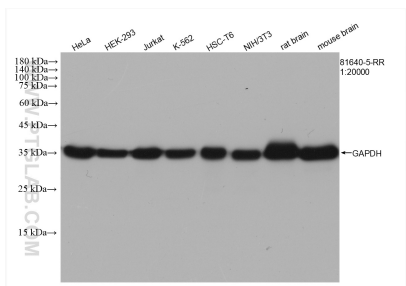
T: 4006900926

E: Proteintech-CN@ptglab.com

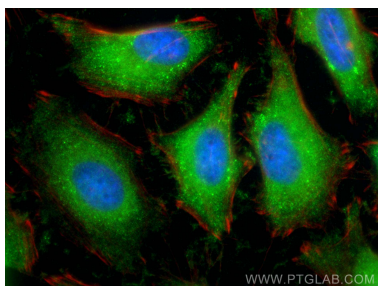
W: ptgcn.com

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

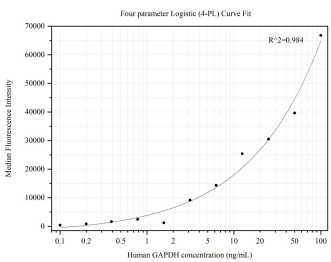
## Selected Validation Data



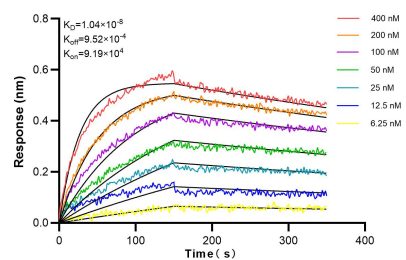
Various lysates were subjected to SDS PAGE followed by western blot with 81640-5-RR (GAPDH antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81640-5-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using GAPDH antibody (81640-5-RR, Clone: 1H18) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red). This data was developed using the same antibody clone with 81640-5-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00549-1, GAPDH Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 81640-3-PBS. Detection antibody: 81640-5-PBS. Standard: Ag0766. Range: 0.098-100 ng/mL.



Biolayer interferometry (BLI) kinetic assays of 81640-5-RR against Human GAPDH were performed. The affinity constant is 10.4 nM.