

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: 100ug , Concentration: 1mg/ml by Nanodrop;	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

Product Information

81640-5-PBS targets GAPDH as part of a matched antibody pair:

MP00549-1: 81640-3-PBS capture and 81640-5-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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.

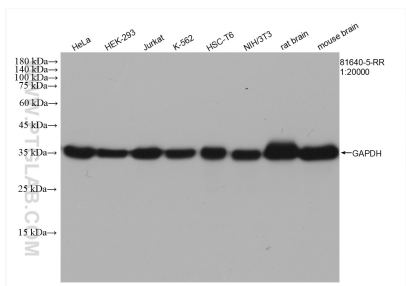
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS Only

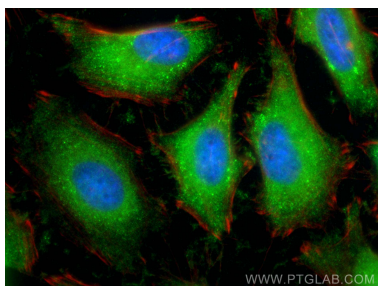
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

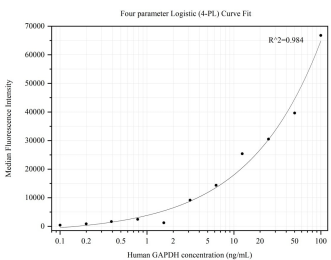
Selected Validation Data



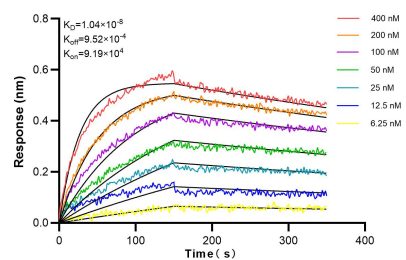
Various lysates were subjected to SDS PAGE followed by western blot with 81640-5-RR (GAPDH antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81640-5-PBS in a different storage buffer formulation.



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.