

For Research Use Only

GAPDH Recombinant antibody

Catalog Number: 81640-5-RR

12 Publications



Basic Information

Catalog Number:

81640-5-RR

Size:

100ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0766

GenBank Accession Number:

BC004109

GeneID (NCBI):

2597

UNIPROT ID:

P04406

Full Name:

glyceraldehyde-3-phosphate dehydrogenase

Calculated MW:

36 kDa

Observed MW:

36 kDa

Purification Method:

Protein A purification

CloneNo.:

1H18

Recommended Dilutions:

WB 1:5000-1:50000

IF/ICC 1:500-1:2000

Applications

Tested Applications:

WB, IF/ICC, ELISA

Cited Applications:

WB

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

Positive Controls:

WB: mouse brain tissue, rat brain tissue, NIH/3T3 cells, HSC-T6 cells, K-562 cells, Jurakat cells, HEK-293 cells, HeLa cells

IF/ICC: 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Yuan Feng	39895706	ACS Omega	WB
Xupeng Zhao	39781460	Int J Biol Sci	WB
Jianfeng Tang	39676891	3 Biotech	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

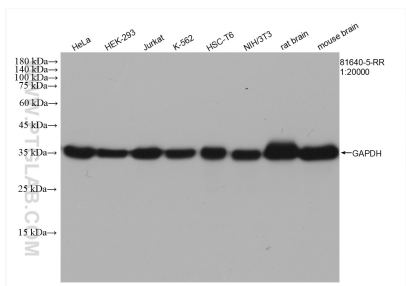
For technical support and original validation data for this product please contact:

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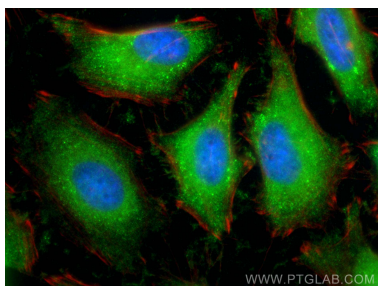
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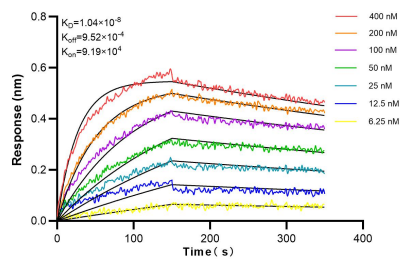
Selected Validation Data



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.



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).



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