

CoraLite®594-conjugated GAPDH Monoclonal antibody

 Catalog Number: **CL594-60004** **3 Publications**

Basic Information

Catalog Number: CL594-60004	GenBank Accession Number: BC004109	Purification Method: Protein A purification
Size: 1000 µg/ml	GeneID (NCBI): 2597	CloneNo.: 1E6D9
Source: Mouse	UNIPROT ID: P04406	Recommended Dilutions: WB 1:5000-1:50000
Isotype: IgG2b	Full Name: glyceraldehyde-3-phosphate dehydrogenase	Excitation/Emission maxima wavelengths: 588 nm / 604 nm
Immunogen Catalog Number: AG0766	Calculated MW: 36 kDa	
	Observed MW: 36 kDa	

Applications

Tested Applications: FC (Intra), WB	Positive Controls: WB : HeLa cells, HEK-293 cells, Jurkat cells
Cited Applications: WB	
Species Specificity: human, mouse, rat, zebrafish, yeast, plant	
Cited Species: human, mouse	

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.

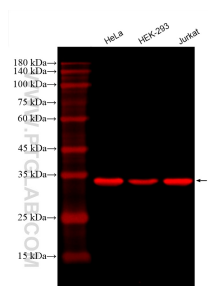
Notable Publications

Author	Pubmed ID	Journal	Application
Guoqing Sun	36138991	Brain Sci	WB
Longfei Wang	37800598	Int J Mol Med	WB
Sascha Röth	37591251	Cell Chem Biol	WB

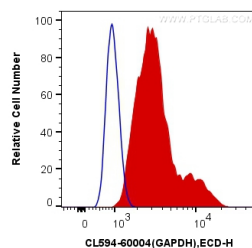
Storage

Storage:
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.
 Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with CL594-60004 (GAPDH antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



1×10^6 HeLa cells were intracellularly stained with 0.2 ug CoraLite®594 Anti-Human GAPDH (CL594-60004, Clone:1E6D9) (red), or 0.2 ug Mouse IgG2b Isotype Control (CL594-66360-3, Clone: K11B8C4B5) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).