For Research Use Only

## CoraLite®594-conjugated GAPDH Monoclonal antibody

Catalog Number: CL594-60004

Featured Product

11 Publications



**Basic Information** 

Catalog Number: CL594-60004

Source: Mouse Isotype: IgG2b

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.: 1E6D9

Recommended Dilutions:

WB: 1:5000-1:50000

FC (Intra): 0.40 ug per 10^6 cells in a

100 µl suspension

Excitation/Emission maxima

wavelengths: 588 nm / 604 nm

**Applications** 

Tested Applications: WB, FC (Intra) Cited Applications:

WB, IF

Species Specificity:

human, mouse, rat, zebrafish, yeast

Cited Species: human, mouse, rat **Positive Controls:** 

WB: HeLa cells, HEK-293 cells, Jurkat cells

FC (Intra): 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
Guoqing Sun	36138991	Brain Sci	WB
Yu-pu Liu	36204278	iScience	
Kai Zheng	40919134	MedComm (2020)	WB

Storage

Storage

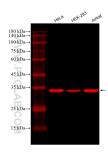
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer

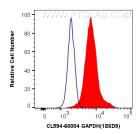
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

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.



1X10^6 HeLa cells were intracellularly stained with 0.4 ug CoraLite®594 Anti-Human GAPDH (CL594-60004, Clone:1E6D9) (red), or 0.4 ug Mouse IgG2b Isotype Control (CL594-66360-3, Clone: K11B8C4B5) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.