

# CoraLite® Plus 488-conjugated GAPDH Monoclonal antibody

 Catalog Number: **CL488-60004** **7 Publications**

## Basic Information

<b>Catalog Number:</b> CL488-60004	<b>GenBank Accession Number:</b> BC004109	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 2597	<b>CloneNo.:</b> 1E6D9
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P04406	<b>Recommended Dilutions:</b> WB 1:2000-1:16000
<b>Isotype:</b> IgG2b	<b>Full Name:</b> glyceraldehyde-3-phosphate dehydrogenase	<b>Excitation/Emission maxima wavelengths:</b> 493 nm / 522 nm
<b>Immunogen Catalog Number:</b> AG0766	<b>Calculated MW:</b> 36 kDa	
	<b>Observed MW:</b> 36 kDa	

## Applications

<b>Tested Applications:</b> FC (Intra), WB	<b>Positive Controls:</b> WB : A549 cells, HeLa cells, HEK-293 cells, Jurkat cells
<b>Cited Applications:</b> WB	
<b>Species Specificity:</b> human, mouse, rat, zebrafish, yeast, plant	
<b>Cited Species:</b> human, rat, 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.

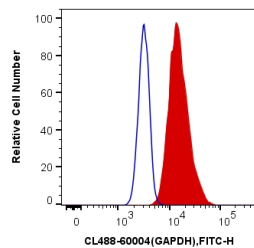
## Notable Publications

Author	Pubmed ID	Journal	Application
Decai Chi	34780782	Exp Cell Res	WB
Julie A Hicks	29577951	Virus Res	WB
Guojun Gao	32507767	Aging (Albany NY)	WB

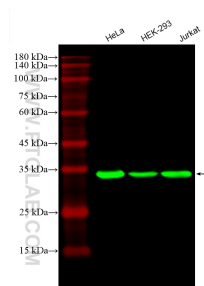
## Storage

**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

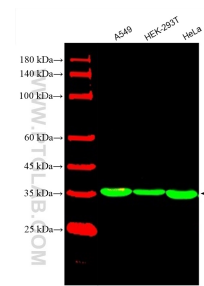
## Selected Validation Data



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human GAPDH (CL488-60004, Clone:1E6D9) (red), or 0.4 ug Mouse IgG2b Isotype Control (CL488-66360-3, Clone: K11B8C4B5) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Various lysates were subjected to SDS PAGE followed by western blot with CL488-60004 (GAPDH antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with CL488-60004 (GAPDH antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.