For Research Use Only

CoraLite® Plus 488-conjugated GAPDH Monoclonal antibody

Catalog Number:CL488-60004 Featured Product 10 Publications

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Basic Information

Catalog Number:
CL488-60004

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

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: 1:2000-1:16000
FC (Intra): 0.40 ug per 10^6 cells in a 100 µl suspension

Excitation/Emission maxima wavelengths:
493 nm / 522 nm

Applications

Tested Applications:
WB, FC (Intra)

Cited Applications:
WB

Species Specificity:
human, mouse, rat, zebrafish, yeast, plant

Cited Species:
human, mouse, rat

Positive Controls:

WB : A549 cells, 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

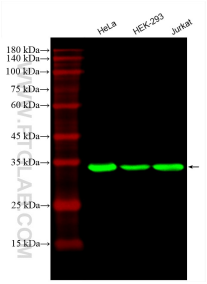
Author	Pubmed ID	Journal	Application
Decai Chi	34780782	Exp Cell Res	WB
Julie A Hicks	29577951	Virus Res	WB
Guojun Gao	32507767	Aging (Albany NY)	WB

Storage

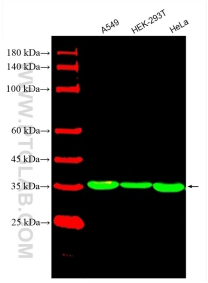
Storage:
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3
Aliquoting is unnecessary for -20°C storage

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

Selected Validation Data



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.



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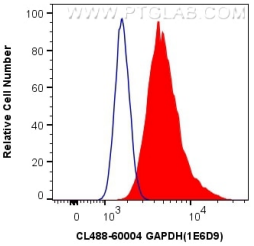

1X10^6 HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human GAPDH (CL488-60004, Clone:1E6D9) (red), or 0.4 ug Mouse IgG2b Isotype Control (CL488-66360-3, Clone: K11B8C4B5) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).