

CoraLite® Plus 488-conjugated Beta Actin Monoclonal antibody

Catalog Number: CL488-66009

4 Publications

Basic Information

Catalog Number: CL488-66009	GenBank Accession Number: NM_001101	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 60	CloneNo.: 2D4H5
Source: Mouse	Full Name: actin, beta	Recommended Dilutions: WB 1:2000-1:10000 IF 1:50-1:500
Isotype: IgG2b	Calculated MW: 42 kDa	Excitation/Emission maxima wavelengths: 493 nm / 522 nm

Applications

Tested Applications: FC (Intra), IF, WB	Positive Controls:
Cited Applications: IF, WB	WB : HepG2 cells, HeLa cells, HEK-293 cells
Species Specificity: human, mouse, rat, hamster, zebrafish, monkey	IF : MDCK cells, U2OS cells
Cited Species: human, rat, mouse	

Background Information

Actins are highly conserved globular proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. At least six isoforms of actins are known in mammals and other vertebrates: alpha (ACTC1, cardiac muscle 1), alpha 1 (ACTA1, skeletal muscle) and 2 (ACTA2, aortic smooth muscle), beta (ACTB), gamma 1 (ACTG1) and 2 (ACTG2, enteric smooth muscle). Beta and gamma 1 are two non-muscle actin proteins. Most actins consist of 376aa, while ACTG2 (rich in muscles) has 375aa and ACTG1(found in non-muscle cells) has only 374aa. Beta actin has been widely used as the internal control in RT-PCR and Western Blotting as a 42-kDa protein. However, the 41 kDa cleaved fragment of beta actin can be generated during apoptosis process. This antibody can recognize all the actins. The isotype of this antibody is IgG2b. And the antibody is CL488 (Ex/Em 488 nm/515 nm) conjugated.

Notable Publications

Author	Pubmed ID	Journal	Application
Xueli Yu	36106568	Br J Pharmacol	WB
Junqi Fu	36133745	Mediators Inflamm	WB
Chui-Wei Wong	35876189	Nanoscale	IF

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.

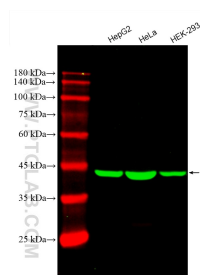
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

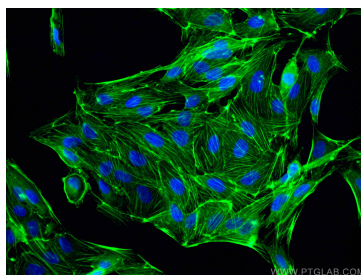
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

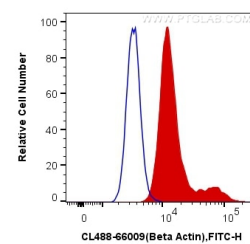
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with CL488-66009 (Beta Actin antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Methanol) fixed MDCK cells using Coralite® Plus 488 Beta Actin antibody (CL488-66009, Clone: 2D4H5) at dilution of 1:200.



1X10⁶ HeLa cells were intracellularly stained with 0.8 ug Coralite® Plus 488 Anti-Human Beta Actin (CL488-66009, Clone:2D4H5) (red), or 0.8 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).