

For Research Use Only

CoraLite® Plus 488-conjugated Beta Actin Monoclonal antibody

Catalog Number: CL488-66009

Featured Product

6 Publications



Basic Information

Catalog Number:

CL488-66009

Concentration:

1000 ug/ml

Source:

Mouse

Isotype:

IgG2b

GenBank Accession Number:

NM_001101

GeneID (NCBI):

60

UNIPROT ID:

P60709

Full Name:

actin, beta

Calculated MW:

42 kDa

Observed MW:

42 kDa

Purification Method:

Protein A purification

CloneNo.:

2D4H5

Recommended Dilutions:

WB: 1:2000-1:10000

IF/ICC: 1:50-1:500

FC (Intra): 0.80 ug per 10⁶ cells in a 100 µl suspension

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

Applications

Tested Applications:

WB, IF/ICC, FC (Intra)

Cited Applications:

WB, IF

Species Specificity:

human, mouse, rat, canine, monkey, zebrafish, hamster

Cited Species:

human, mouse, rat

Positive Controls:

WB : HepG2 cells, HeLa cells, HEK-293 cells

IF/ICC : MDCK cells, U2OS cells

FC (Intra) : HeLa cells,

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, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

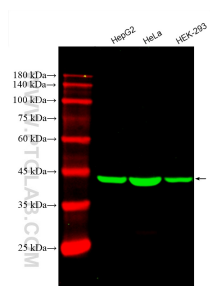
T: 4006900926

E: Proteintech-CN@ptglab.com

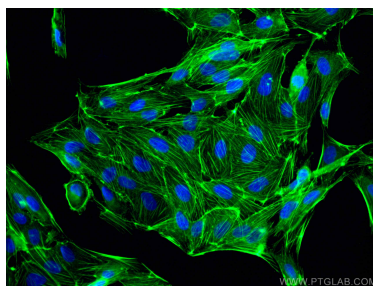
W: ptgcn.com

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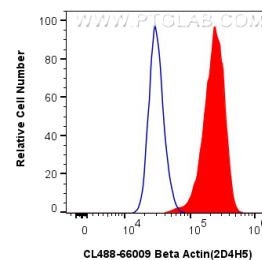
Selected Validation Data



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.



(blue) 1×10^6 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 Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).