For Research Use Only

## CoraLite® Plus 647-conjugated Beta Actin Monoclonal antibody

IgG2b

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Antibodies | ELISA kits | Proteins
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Catalog Number: CL647-66009

Featured Product

**Basic Information** 

Catalog Number:GenBank Accession Number:Purification Method:CL647-66009NM\_001101Protein A purification

Source: UNIPROT ID: Recommended Dilutions: Mouse P60709 IF/ICC: 1:50-1:500

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

actin, beta 100 µl suspension FC: 0.40 ug per 10^6 cells in a 100 µl

Calculated MW: suspension
42 kDa

Observed MW: Excitation/Emission maxima wavelengths: 42 kDa 654 nm / 674 nm

FC: HeLa cells.

**Applications** 

Tested Applications:

IF/ICC, FC (Intra)

Species Specificity:

Positive Controls:

IF/ICC : HeLa cells,

FC (Intra) : HeLa cells,

human, mouse, rat, hamster, zebrafish, monkey, dog

## **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. For murine tissue sample, conjugated antibody (HRP-66009) or rabbit antibody (20536-1-AP) is preferable.

Storage

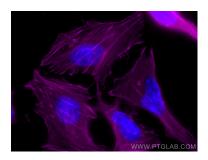
Storage:

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

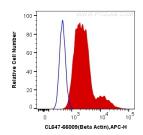
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using CoraLite® Plus 647 Beta Actin antibody (CL647-66009, Clone: 2D4H5) at dilution of 1:200.



1X10^6 HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 647 Anti-Human Beta Actin (CL647-66009, Clone:2D4H5) (red), or 0.4 ug Mouse IgG2b Isotype Control (CL488-66360-3, Clone: K11B8C4B5) (blue). Cells were fixed with 4% PFA and permeabilized with Intracellular Staining Permeabilization Wash Buffer.