

CoraLite® Plus 647-conjugated Beta Actin Monoclonal antibody

Catalog Number: CL647-66009

Featured Product

Basic Information

Catalog Number:

CL647-66009

Size:

1000 µg/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:

IF/ICC 1:50-1:500

Excitation/Emission maxima wavelengths:

654 nm / 674 nm

Applications

Tested Applications:

IF/ICC, FC (Intra)

Species Specificity:

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

Positive Controls:

IF/ICC : 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. For murine tissue sample, conjugated antibody (HRP-66009) or rabbit antibody (20536-1-AP) is preferable.

Storage

Storage:

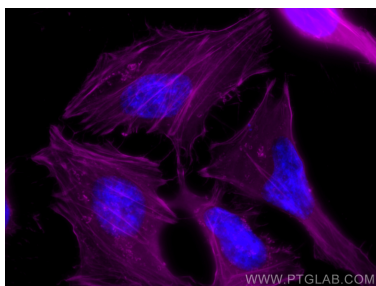
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

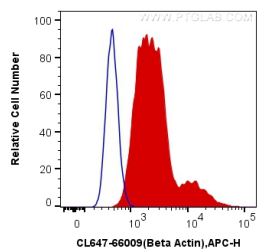
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

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.



1X10⁶ 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.