For Research Use Only

## CoraLite®555-conjugated Beta Actin Monoclonal antibody



**Purification Method:** 

Catalog Number: CL555-66009

Featured Product

**Basic Information** 

Catalog Number: GenBank Accession Number:

CL555-66009 NM\_001101 Protein A purification

Size: GeneI D (NCBI): CloneNo.: 100ul , Concentration: 1000 µg/ml by 60 2D4H5

Nanodrop; Full Name: Recommended Dilutions:
Source: actin. beta IF 1:50-1:500

Mouse Calculated MW: Excitation/Fi

Mouse Calculated MW: Excitation/Emission maxima Isotype: 42 kDa wavelengths:

IgG2b Observed MW: 555 nm / 570 nm

42 kDa

**Applications** 

Tested Applications: FC (Intra), IF

Species Specificity:

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

**Positive Controls:** 

IF: A549 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.

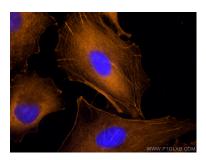
Storage Buffer:

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

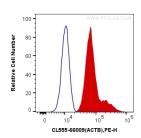
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

## Selected Validation Data



Immunofluorescent analysis of (-20°C Methanol) fixed A549 cells using Coralite®555 Beta Actin antibody (CL555-66009, Clone: 2D4H5) at dilution of 1:100.



1X10^6 HeLa cells were intracellularly stained with 0.4 ug CoraLite® 555 Anti-Human Beta Actin (CL555-66009, Clone:2D4H5) (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).