For Research Use Only

## CoraLite® Plus 488-conjugated Beta Actin Polyclonal antibody

Catalog Number:CL488-20536 Featured Product

1 Publications



**Basic Information** 

Catalog Number: CL488-20536

Source:

Rabbit Isotype:

Immunogen Catalog Number:

AG14521

GenBank Accession Number:

BC002409 GeneID (NCBI):

ieneiD (NCBI)

UNIPROT ID: P60709

Full Name: actin, beta

Calculated MW: 375 aa, 42 kDa

Observed MW: 42 kDa Purification Method:

Antigen affinity purification

Recommended Dilutions:

FC (Intra): 0.20 ug per 10<sup>6</sup> cells in a

100 µl suspension

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

**Applications** 

**Tested Applications:** 

FC (Intra)

Cited Applications:

WB

Species Specificity:

human, mouse, rat, canine, monkey

Cited Species: human

Positive Controls:

FC (Intra): HepG2 cells,

## **Background Information**

Beta Actin, also named as ACTB and F-Actin, belongs to the actin family. 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 37-40, 31, 15 kDa cleaved fragment of beta actin can be generated during apoptosis process. This antibody was generated against N-terminal region of human beta actin protein and can cross-react with other actins. (9173887, 11217076, 10229193)

## **Notable Publications**

Author	Pubmed ID	Journal	Application
Fangyue Cheng	40216124	Int J Biol Macromol	WB

Storage

Storage:

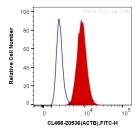
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



1X10^6 HepG2 cells were intracellularly stained with 0.2 ug Coralite® Plus 488 Anti-Human Beta Actin (CL488-20536) (red), or 0.2 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.