For Research Use Only

CoraLite® Plus 647-conjugated Beta Actin Polyclonal antibody

www.ptglab.com

Catalog Number: CL647-20536 Featured Product

Basic Information

Catalog Number: CL647-20536 Concentration:

1000 ug/ml Source: Rabbit Isotype:

Immunogen Catalog Number: AG14521

42 kDa

Calculated MW: 375 aa, 42 kDa Observed MW:

GenBank Accession Number:

BC002409

GeneID (NCBI):

UNIPROT ID:

Full Name:

actin, beta

P60709

Purification Method:

Antigen affinity purification

Recommended Dilutions: IF/ICC: 1:50-1:500

FC (Intra): 0.20 ug per 10⁶ cells in a

100 µl suspension

Excitation/Emission maxima

wavelengths: 654 nm / 674 nm

Applications

Tested Applications: IF/ICC, FC (Intra) Species Specificity:

human, mouse, rat, canine, monkey

Positive Controls:

IF/ICC: HepG2 cells, 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

Storage

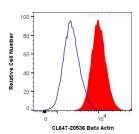
Storage:

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

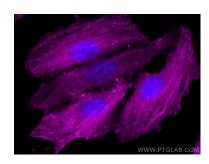
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



1X10^6 HepG2 cells were intracellularly stained with 0.2 ug CoraLite® Plus 647 Anti-Human Beta Actin (CL647-20536) (red), or 0.2 ug isotype control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CoraLite® Plus 647 Beta Actin antibody (CL647-20536) at dilution of 1:200.