For Research Use Only

CoraLite®594-conjugated Beta Actin Monoclonal antibody

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Catalog Number:CL594-60008 4 Publications

Basic Information

Catalog Number: CL594-60008 Concentration:

1000 ug/ml Source:

Mouse Isotype:

Immunogen Catalog Number:

AG0297

Calculated MW: 375 aa, 42 kDa

Observed MW: 42 kDa

BC002409

GeneID (NCBI):

UNIPROT ID:

Full Name:

actin, beta

P60709

GenBank Accession Number:

Purification Method:

Caprylic acid/ammonium sulfate

precipitation

CloneNo.: 7D2C10

Recommended Dilutions: WB 1:1000-1:4000 IF/ICC 1:200-1:1000

Excitation/Emission maxima wavelengths: 588 nm / 604 nm

Applications

Tested Applications:

WB, IF/ICC

Cited Applications:

WB. IF

Species Specificity:

human, mouse, rat, canine, zebrafish, plant

Cited Species:

rat

Positive Controls:

WB: HepG2 cells, HeLa cells, HEK-293 cells

IF/ICC: HeLa cells, MDCK 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 kDa cleaved fragment of beta actin can be generated during apoptosis process. This antibody is conjugated with CL594.Ex/Em 593 nm/614 nm.

Notable Publications

Author	Pubmed ID	Journal	Application
Zhao JianHua	39380368	Aging Cell	WB
Jie Hou	39190351	Proc Natl Acad Sci U S A	IF
Run-Qi Li	39025266	Neurosci Res	WB

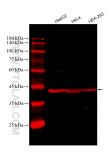
Storage

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

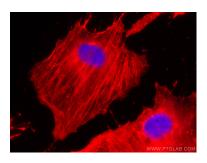
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with CL594-60008 (Beta Actin antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using CoraLite®594 Beta Actin antibody (CL594-60008, Clone: 7D2C10) at dilution of 1:200.