

# CoraLite® Plus 488-conjugated Beta Actin Monoclonal antibody

Catalog Number: **CL488-60008**

## Basic Information

**Catalog Number:**

CL488-60008

**Size:**

1000 µg/ml

**Source:**

Mouse

**Isotype:**

IgM

**Immunogen Catalog Number:**

AG0297

**GenBank Accession Number:**

BC002409

**GeneID (NCBI):**

60

**UNIPROT ID:**

P60709

**Full Name:**

actin, beta

**Calculated MW:**

375 aa, 42 kDa

**Purification Method:**

Caprylic acid/ammonium sulfate precipitation

**CloneNo.:**

7D2C10

**Recommended Dilutions:**

WB 1:2000-1:10000

**Excitation/Emission maxima wavelengths:**

493 nm / 522 nm

## Applications

**Tested Applications:**

WB

**Species Specificity:**

human, mouse, rat, plant, Zebrafish

**Positive Controls:**

WB : HepG2 cells, HeLa cells, HEK-293 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 41 kDa cleaved fragment of beta actin can be generated during apoptosis process. This antibody is conjugated with CL488(Ex/Em 488 nm/515 nm), and can recognize all the actins.

## Storage

**Storage:**

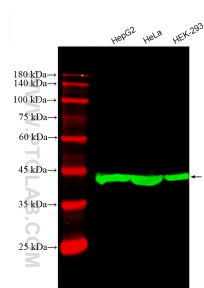
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

**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



Various lysates were subjected to SDS PAGE followed by western blot with CL488-60008 (Beta Actin antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.