For Research Use Only

HRP-conjugated Beta Actin Recombinant monoclonal antibody



Catalog Number: HRP-81115 1 Publications

Basic Information

Catalog Number: HRP-81115

Source:

Rabbit

GenBank Accession Number: BC002409

GeneID (NCBI):

Isotype:

UNIPROT ID: P60709

Immunogen Catalog Number: AG14521

Full Name: actin, beta

Calculated MW: 375 aa, 42 kDa Observed MW: 42 kDa

Purification Method:

Protein A purification

CloneNo.: 4H1

Recommended Dilutions:

WB: 1:2000-1:16000

Applications

Tested Applications:

WB

Cited Applications:

Species Specificity: human, mouse, rat, pig

WB

Positive Controls:

WB: HeLa cells, rat brain tissue, mouse brain tissue

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 Jiawei Zhang 40248101 Front Pharmacol WB

Storage

Storage:

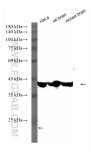
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with HRP-81115 (Beta Actin antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.