For Research Use Only

Beta Actin Monoclonal antibody, PBS Only

Catalog Number: 60008-1-PBS



Basic Information

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BC002409

Purification Method: Caprylic acid/ammonium sulfate

Concentration:

GeneID (NCBI):

GenBank Accession Number:

precipitation

1mg/ml

UNIPROT ID: P60709

Full Name:

actin, beta

CloneNo.: 7D2C10

Source: Mouse Isotype: IgM

Immunogen Catalog Number:Calculated MW:AG0297375 aa, 42 kDa

Observed MW: 42 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA

Species Specificity:

human, mouse, rat, zebrafish, plant

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 can recognize all the actins.

Storage

Storage:

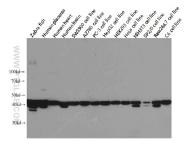
Store at -80°C.

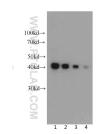
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS only, pH7.3

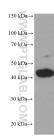
Selected Validation Data





Hela whole cell lysate (20ug/lane) was subjected to SDS-PAGE followed by western blot with 60008-1-Ig at dilution of:

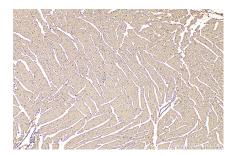
Lane 1: 1:1000 Lane 2: 1:2000 Lane 3: 1:4000 Lane 4: 1:8000

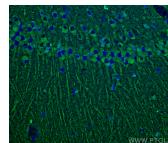


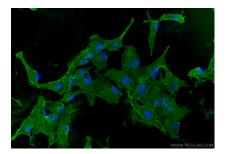
Western blot analysis of Beta-actin in various tissues and cell lines using Proteintech antibody 60008-1-Ig at a dilution of 1:5000. Extra bands were detected in some species with unknown reason. This data was developed using the same antibody clone with 60008-1-PBS in a different storage buffer formulation.

Western blot of Hela cell with anti-Actin-Beta (60008-1-Ig) at various dilutions. This data was developed using the same antibody clone with 60008-1-PBS in a different storage buffer formulation.

arabidopsis whole plant tissue were subjected to SDS PAGE followed by western blot with 60008-1-Ig (beta actin Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60008-1-PBS in a different storage buffer formulation.



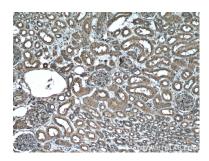




Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 60008-1-Ig (Beta Actin antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60008-1-PBS in a different storage buffer formulation.

Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat brain tissue using Beta Actin antibody (60008-1-Ig, Clone: 7D2C10) at dilution of 1:1000 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60008-1-PBS in a different storage buffer formulation.

Immunofluorescent analysis of (4% PFA) fixed MDCK cells using Beta Actin antibody (60008-1-lg, Clone: 7D2C10) at dilution of 1:800 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002). This data was developed using the same antibody clone with 60008-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human kidney tissue slide using 60008-1-lg (beta Actin antibody) at dilution of 1:500 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60008-1-PBS in a different storage buffer formulation