

For Research Use Only

# Beta Actin Monoclonal antibody, PBS Only

Catalog Number: 60008-1-PBS



## Basic Information

<b>Catalog Number:</b> 60008-1-PBS	<b>GenBank Accession Number:</b> BC002409	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 100ug, Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 60	<b>CloneNo.:</b> 7D2C10
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P60709	
<b>Isotype:</b> IgM	<b>Full Name:</b> actin, beta	
<b>Immunogen Catalog Number:</b> AG0297	<b>Calculated MW:</b> 375 aa, 42 kDa	
	<b>Observed MW:</b> 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

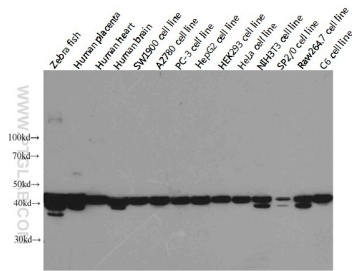
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

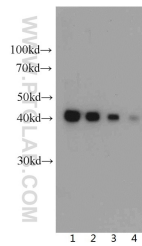
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data



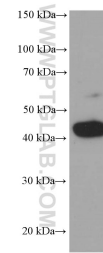
Western blot analysis of Beta-actin in various tissues and cell lines using Proteintech antibody 60008-1-Ig at a dilution of 1:5000. Extra bands were detected in some species with unknown reason. This data was developed using the same antibody clone with 60008-1-PBS in a different storage buffer formulation.



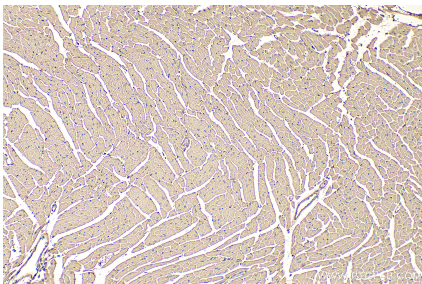
Western blot of HeLa cell with anti-Actin-Beta (60008-1-Ig) at various dilutions. This data was developed using the same antibody clone with 60008-1-PBS in a different storage buffer formulation.

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

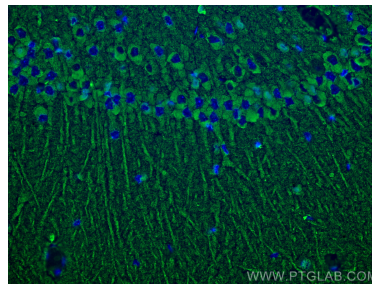
Lane 1: 1:1000  
Lane 2: 1:2000  
Lane 3: 1:4000  
Lane 4: 1:8000



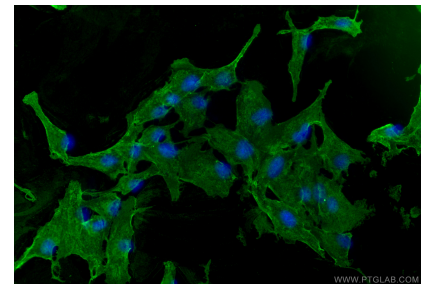
Arabidopsis whole plant tissue were subjected to SDS PAGE followed by western blot with 60008-1-Ig (beta actin Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60008-1-PBS in a different storage buffer formulation.



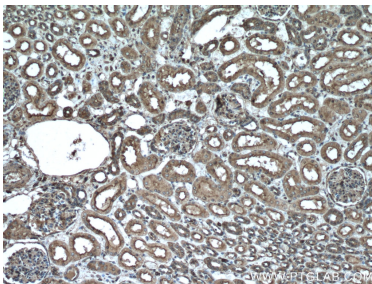
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 60008-1-Ig (Beta Actin antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60008-1-PBS in a different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