## For Research Use Only

# Biotin-conjugated Beta Actin Monoclonal antibody

Catalog Number:Biotin-60008 4 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

Biotin-60008 BC002409
Size: GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 60

Nanodrop; UNIPROT ID:

Source: P60709 Mouse Full Name:

Isotype: actin, beta
IgM Calculated MW.
Immunogen Catalog Number: 375 aa, 42 kDa
AG0297 Observed MW:

42 kDa

Purification Method:

Caprylic acid/ammonium sulfate

precipitation

CloneNo.: 7D2C10

Recommended Dilutions:

IHC 1:50-1:500

#### **Applications**

**Tested Applications:** 

IHC

Cited Applications:

WE

Species Specificity:

human, mouse, rat, pig, plant, Zebrafish

Cited Species:

human, rat, pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

#### Positive Controls:

IHC: mouse heart 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 kDa cleaved fragment of beta actin can be generated during apoptosis process. This antibody can recognize all the actins.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Gaojian Zhang	35372814	iScience	WB
Yi Zhang	38044598	Balkan Med J	WB
Juan Luo	37614421	Exp Ther Med	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, pH 7.3.

Aliquoting is unnecessary for -20°C storage

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



Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using Biotin-60008 (beta Actin antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using Biotin-60008 (beta Actin antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).