

Anti-beta Actin Mouse Monoclonal Antibody
Catalog # ABO15135**Specification****Anti-beta Actin Mouse Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC
Primary Accession	P60709
Host	Mouse
Isotype	IgG1
Reactivity	Rat, Human, Mouse, Rabbit, Chicken
Clonality	Monoclonal
Format	Liquid

Description

Anti-beta Actin Mouse Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat, Chicken, Rabbit.

Anti-beta Actin Mouse Monoclonal Antibody - Additional Information**Gene ID 60****Other Names**

Actin, cytoplasmic 1, 3.6.4.-, Beta-actin, Actin, cytoplasmic 1, N-terminally processed, ACTB

Calculated MW

42 kDa KDa

Application Details

WB 1:3000-1:10000
IHC 1:100-1:200
ICC/IF 1:100-1:200

Contents

Mouse IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human beta Actin

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-beta Actin Mouse Monoclonal Antibody - Protein Information**Name** ACTB

Function

Actin is a highly conserved protein that polymerizes to produce filaments that form cross-linked networks in the cytoplasm of cells (PubMed:25255767, PubMed:29581253). Actin exists in both monomeric (G-actin) and polymeric (F-actin) forms, both forms playing key functions, such as cell motility and contraction (PubMed:29581253). In addition to their role in the cytoplasmic cytoskeleton, G- and F- actin also localize in the nucleus, and regulate gene transcription and motility and repair of damaged DNA (PubMed:29925947). Plays a role in the assembly of the gamma-tubulin ring complex (gTuRC), which regulates the minus-end nucleation of alpha-beta tubulin heterodimers that grow into microtubule protofilaments (PubMed:39321809, PubMed:38609661). Part of the ACTR1A/ACTB filament around which the dyactin complex is built (By similarity). The dyactin multiprotein complex activates the molecular motor dynein for ultra-processive transport along microtubules (By similarity).

Cellular Location

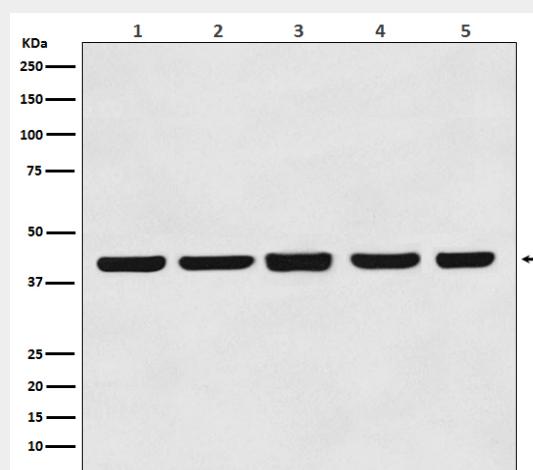
Cytoplasm, cytoskeleton. Nucleus Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

Anti-beta Actin Mouse Monoclonal Antibody - Protocols

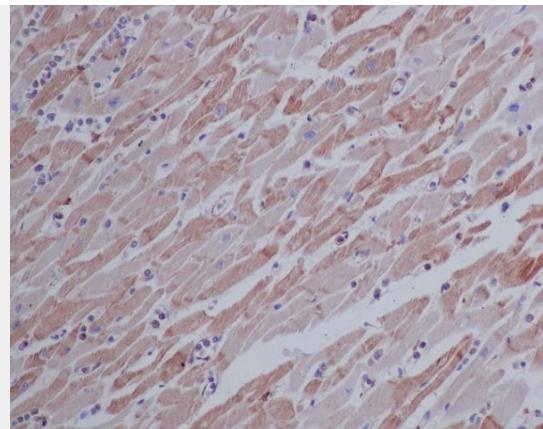
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-beta Actin Mouse Monoclonal Antibody - Images



Western blot analysis of beta Actin expression in (1) Hela cell lysate; (2) Rat brain lysate; (3) Mouse brain lysate; (4) Chicken lung lysate; (5) Rabbit testis lysate with beta Actin mouse mAb



Immunohistochemical analysis of paraffin-embedded human heart, using beta Actin Mouse Monoclonal Antibody.



Immunofluorescent analysis of HepG2 cells, using beta Actin mAb.