

**Anti-beta Actin Mouse Monoclonal Antibody**  
**Catalog # ABO15136****Specification****Anti-beta Actin Mouse Monoclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P60709</a>
Host	Mouse
Isotype	IgG2b
Reactivity	Rat, Human, Mouse, Monkey, Goat
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-beta Actin Mouse Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Monkey, Mouse, Rat, Goat.

**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

**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:<a href="http://www.uniprot.org/citations/25255767" target="\_blank">25255767</a>, PubMed:<a href="http://www.uniprot.org/citations/29581253" target="\_blank">29581253</a>). Actin exists in both monomeric (G-actin) and polymeric (F-actin) forms, both forms playing key functions, such as cell motility and contraction (PubMed:<a href="http://www.uniprot.org/citations/29581253" target="\_blank">29581253</a>). 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:<a href="http://www.uniprot.org/citations/29925947" target="\_blank">29925947</a>). 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:<a href="http://www.uniprot.org/citations/39321809" target="\_blank">39321809</a>, PubMed:<a href="http://www.uniprot.org/citations/38609661" target="\_blank">38609661</a>). 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

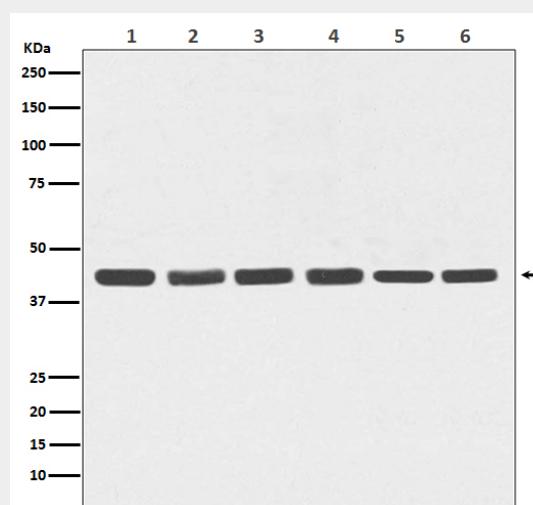
Cytoplasm, cytoskeleton. Nucleus Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

## 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; (2)Human fetal kidney lysate; (3) 3T3

cell lysate; (4) PC-12 cell lysate; (5) COS-1 cell lysate; (6) Goat muscle lysate.