

**Anti- $\beta$ -Actin Antibody**  
**Mouse Anti Human Monoclonal Antibody**  
**Catalog # AP53385****Specification**

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**Anti- $\beta$ -Actin Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P60709</a>
Other Accession	<a href="#">NM_001101</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG2b</b>
Immunogen	<b>Purified recombinant human beta actin protein fragments expressed in E.coli.</b>
Purification	<b>Affinity purified</b>
Calculated MW	<b>45 KDa</b>

**Anti- $\beta$ -Actin Antibody - Additional Information****Gene ID 60****Other Names**

A X actin like protein;ACTB;ACTB\_HUMAN;Actin;Actin cytoplasmic 1;Actx;b actin;b-actin;Beta cytoskeletal actin;Beta-actin;cytoplasmic 1;Melanoma X actin;N-terminally processed;PS1TP5 binding protein 1;PS1TP5BP1.

**Dilution**

WB~~1:1000

**Format**

Purified mouse monoclonal antibody in PB(pH 7.4) containing with 0.09% (W/V) sodium azide,0.1mg/mlBSA and 50% glycerol.

**Storage**

Store at -20 °C.Stable for 12 months from date of receipt

**Anti- $\beta$ -Actin 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>). Part of the ACTR1A/ACTB filament around which the dynactin complex is built. The dynactin multiprotein complex activates the molecular motor dynein for ultra-processive transport along microtubules (By similarity).

#### Cellular Location

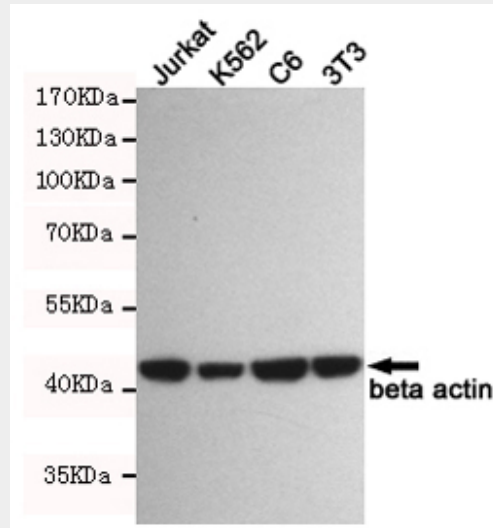
Cytoplasm, cytoskeleton. Nucleus Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

#### Anti- $\beta$ -Actin 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 Antibody - Images



Western blot detection of beta actin in Jurkat, K562, C6, 3T3 and Hela cell lysates using beta actin mouse mAb (1:1000 diluted). Predicted band size: 45KDa. Observed band size: 45KDa.

#### Anti- $\beta$ -Actin Antibody - Background

Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.

#### Anti- $\beta$ -Actin Antibody - Citations

- [The Suppression of miR-199a-3p by Promoter Methylation Contributes to Papillary Thyroid Carcinoma Aggressiveness by Targeting RAP2a and DNMT3a](#)
- [Regulation of 25-hydroxyvitamin D-1-hydroxylase and 24-hydroxylase in keratinocytes by](#)

PTH and FGF23.

- Nigericin exerts anticancer effects on human colorectal cancer cells by inhibiting Wnt/ $\beta$ -catenin signaling pathway.
- Tumor suppressive role of miR-1224-5p in keloid proliferation, apoptosis and invasion via the TGF- $\beta$ 1/Smad3 signaling pathway.
- Anterior gradient 2 is induced in cutaneous wound and promotes wound healing through its adhesion domain.