

## Anti-β-Actin Antibody

Mouse Anti Human Monoclonal Antibody Catalog # AP53385

### **Specification**

## Anti-β-Actin Antibody - Product Information

Application WB
Primary Accession P60709
Other Accession NM\_001101

Reactivity
Host
Clonality
Isotype
Human, Mouse, Rat
Mouse
Monoclonal
IgG2b

Immunogen Purified recombinant human beta actin

protein fragments expressed in E.coli.
Purification Affinity purified

Calculated MW 45 KDa

## Anti-β-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-β-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/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



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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**

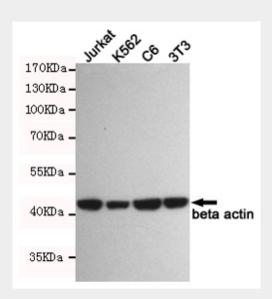
Cytoplasm, cytoskeleton. Nucleus Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

### Anti-β-Actin Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-β-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: 45 KDa. Observed band size: 45 KDa.

## Anti-β-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-β-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.





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- Nigericin exerts anticancer effects on human colorectal cancer cells by inhibiting
- Wnt/β-catenin signaling pathway.
   Tumor suppressive role of miR-1224-5p in keloid proliferation, apoptosis and invasion via the TGF-β1/Smad3 signaling pathway.
- Anterior gradient 2 is induced in cutaneous wound and promotes wound healing through its adhesion domain.