10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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	**Human, Mouse, Rat**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**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: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). 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).

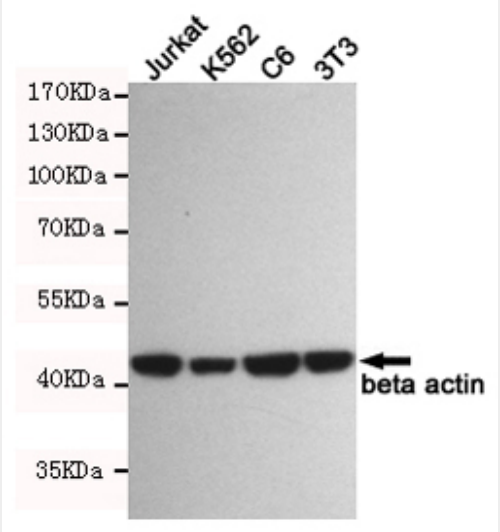
Cellular Location
Cytoplasm, cytoskeleton. Nucleus Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

Anti-β-Actin Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- 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:45KDa.Observed band size:45KDa.

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.

- 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.