

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 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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: [25255767](http://www.uniprot.org/citations/25255767), PubMed: [29581253](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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 dynactin complex is built (By similarity). The dynactin multiprotein complex activates the molecular motor dynein for ultra-processive transport along microtubules (By similarity).

Cellular Location

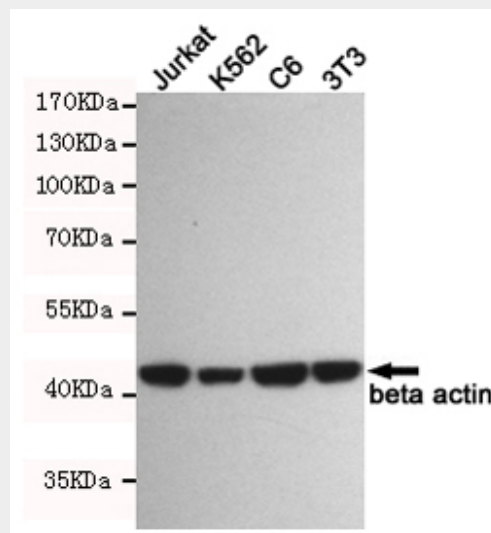
Cytoplasm, cytoskeleton. Nucleus Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

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 Cytometry](#)
- [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/ \$\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](#)