

# beta Actin Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AP53270

## Product Information

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<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">P60709</a>
<b>Reactivity</b>	Rat, Human, Mouse, Hamster, Monkey, Goat
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG3
<b>Conjugate</b>	Unconjugated
<b>Immunogen</b>	Purified recombinant human beta actin protein fragments expressed in E.coli.
<b>Purification</b>	Affinity Purified
<b>Calculated MW</b>	41737

## Additional Information

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<b>Gene ID</b>	60
<b>Other Names</b>	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.
<b>Dilution</b>	WB~~1:1500
<b>Format</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Protein Information

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<b>Name</b>	ACTB
<b>Function</b>	Actin is a highly conserved protein that polymerizes to produce filaments that form cross-linked networks in the cytoplasm of cells (PubMed: <a href="#">25255767</a> , PubMed: <a href="#">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="#">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="#">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="#">39321809</a> ,

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.

## Background

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

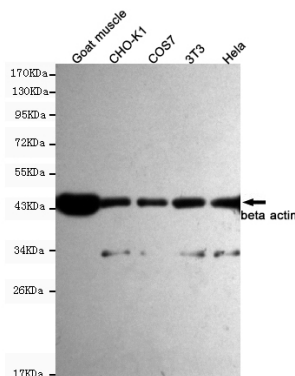
## References

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Nakajima-Iijima S.,et al.Proc. Natl. Acad. Sci. U.S.A. 82:6133-6137(1985).  
Ohmori H.,et al.J. Cell Biol. 116:933-941(1992).  
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## Images

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Western blot detection of beta actin in Hela,3T3,COS7,CHO-k1 and Goat muscle cell lysates using beta actin mouse mAb (1:1500 diluted).Predicted band size:45KDa.Observed band size:45KDa.

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