

**beta Actin Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AP53271****Specification**

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**beta Actin Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P60709</a>
Reactivity	<b>Human, Mouse, Rabbit, Neisseria Gonorrhoeae</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG2b</b>
Calculated MW	<b>45 KDa</b>

**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~~1:10000

**Format**

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

**Storage**

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

**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: [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](http://www.uniprot.org/citations/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.

#### 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](#)

#### beta Actin Antibody - Images



Western blot detection of beta actin in C6,3T3,COS7,CHO-k1,K562 and Goat muscle cell lysates using beta actin mouse mAb (1:10000 diluted).Predicted band size:45KDa.Observed band size:45KDa.

#### 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.

#### beta Actin Antibody - References

- Ponte P.,et al.Nucleic Acids Res. 12:1687-1696(1984).  
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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Gevaert K.,et al.Nat. Biotechnol. 21:566-569(2003).