

**Beta Actin Monoclonal Antibody**  
**Mouse Monoclonal Antibody**  
**Catalog # ABV11741****Specification**

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**Beta Actin Monoclonal Antibody - Product Information**

Application	WB, E, IP
Primary Accession	<a href="#">P60709</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG
Calculated MW	41737

**Beta Actin Monoclonal Antibody - Additional Information****Gene ID 60**

Application & Usage	Western blot: 1-5 µg/ml; ELISA; Immunoblot Analysis: 0.5-2 µg/ml
Alias Symbol	Beta-Actin
<b>Other Names</b>	
PS1TP5BP1 , ACTB, Beta-actin , b-actin	

**Appearance**  
Colorless liquid**Formulation**  
100 ug (1mg/ml) of antibody in 0.01M Tris-HCl, pH 8.0, 0.15M NaCl, and 0.02% sodium azide.**Reconstitution & Storage**  
-20 °C**Background Descriptions****Precautions**

Beta Actin Monoclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Beta Actin Monoclonal 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/25255767" target="\_blank">25255767</a>, 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 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.

### **Beta Actin Monoclonal 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 Monoclonal Antibody - Images**

### **Beta Actin Monoclonal Antibody - Background**

Actin is expressed in all eukaryotic cells and is the major component of the cytoskeleton. At least six types of actin are present in mammalian tissues and fall into three classes. Alpha actin expression is limited to various types of muscle and it regulates contractile potentials for the muscle cells, whereas beta and gamma actin, also known as cytoplasmic actin, are predominantly expressed in nonmuscle cells, controlling cell structure and motility.