

Beta-Actin Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10499**Specification**

Beta-Actin Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB |
| Primary Accession | P60709 |
| Reactivity | Human, Mouse |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Calculated MW | 41737 |

Beta-Actin Antibody - Additional Information**Gene ID 60****Application & Usage**

Western blotting (0.5-2 µg/ml). However, the optimal concentrations should be determined individually. The antibody recognizes 45 kDa beta-Actin in samples from human and mouse origins. Reactivity to other species has not been tested.

Other Names

PS1TP5BP1 , ACTB, Beta-actin , b-actin

Target/Specificity

Beta-Actin

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.2mg/ml) protein A purified rabbit anti-β-Actin polyclonal antibody in phosphate-buffered saline (PBS) containing 0.5 % BSA, 30% glycerol, and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

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

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)). 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](http://www.uniprot.org/citations/39321809), PubMed: [38609661](http://www.uniprot.org/citations/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.

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

Beta-Actin 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.