

## Beta-Actin Antibody

Rabbit Polyclonal Antibody Catalog # ABV10708

## Specification

# **Beta-Actin Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB <u>P60711</u> <u>ABM16832</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 41737

# **Beta-Actin Antibody - Additional Information**

Gene ID 81822

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

0.5 mg/ml affinity purified rabbit anti-beta-Actin polyclonal antibody PBS containing 30% glycerol, 0.5 mg/ml BSA 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. Actin exists in both monomeric (G-actin) and polymeric (F-actin) forms, both forms playing key functions, such as cell motility and contraction. 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. 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 {ECO:0000250|UniProtKB:P60709}. Nucleus {ECO:0000250|UniProtKB:P60709} Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs. {ECO:0000250|UniProtKB:P60709}

**Tissue Location** Expressed in the epididymis (at protein level).

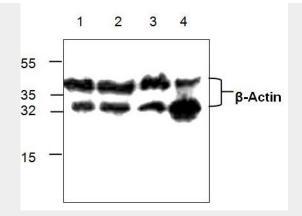
# **Beta-Actin Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

**Beta-Actin Antibody - Images** 





Western blot analysis of  $\beta$  -Actin in Jurkat cell lysate (left lane) and mouse intestine tissue lysate (right lane).

# 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 contactile 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.