

Beta-Actin Antibody (Clone BA3R)

Mouse Monoclonal Antibody Catalog # ABV10443

Specification

Beta-Actin Antibody (Clone BA3R) - Product Information

Application WB
Primary Accession P60709

Reactivity Human, Mouse, Rat, Rabbit

Host Mouse
Clonality Monoclonal
Isotype Mouse IgG2b

Calculated MW 41737

Beta-Actin Antibody (Clone BA3R) - Additional Information

Gene ID 60

Positive Control Tissue lysates of human, mouse, rat and

rabbit origin

Application & Usage Western blot: ~1:1000 - 1:5000.
Other Names

PS1TP5BP1 , ACTB, Beta-actin , b-actin

Target/Specificity

Beta-Actin

Antibody Form

Liquid

AppearanceColorless liquid

Formulation

1 mg/mL in 10 mM PBS, pH 7.2, with 0.05% NaN3

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

Beta-Actin Antibody (Clone BA3R) is for research use only and not for use in diagnostic or therapeutic procedures.



Beta-Actin Antibody (Clone BA3R) - 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, PubMed: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). 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). 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 protafilaments (PubMed:39321809, 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.

Beta-Actin Antibody (Clone BA3R) - Protocols

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

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

Beta-Actin Antibody (Clone BA3R) - Images

Beta-Actin Antibody (Clone BA3R) - 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.