10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-β-Actin Antibody
Catalog # AN1616

Specification

Anti-β-Actin Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P60709
Host	**Mouse**
Clonality	**Mouse Monoclonal**
Isotype	**IgG2b**
Calculated MW	**41737**

Anti-β-Actin Antibody - Additional Information

Gene ID	**60**

Other Names
Actin, b-actin, beta actin

Target/Specificity
Actin is a major cytoskeletal protein involved in diverse cellular functions including cell motility, adhesion, and morphology. Six different actin isoforms have been identified in vertebrates. There are four α isoforms: skeletal, cardiac, and two smooth muscle (enteric and aortic) actins, along with two cytoplasmic actins (β and γ). Actin exists in two principal forms, globular, monomeric (G) actin, and filamentous polymeric (F) actin. The assembly and disassembly of actin filaments, and also their organization into functional networks, is regulated by a variety of actin-binding proteins (ABPs). Phosphorylation may also be important for regulating actin assembly and interaction with ABPs. In Dictyostelium, phosphorylation of Tyr-53 occurs in response to cell stress and this phosphorylation may alter actin polymerization. In B cells, SHP-1 tyrosine dephosphorylation of actin leads to actin filament depolymerization following BCR stimulation

Dilution
WB~~1:1000
IHC~~1:100~500

Format
Protein G Purified

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

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

Shipping
Blue Ice

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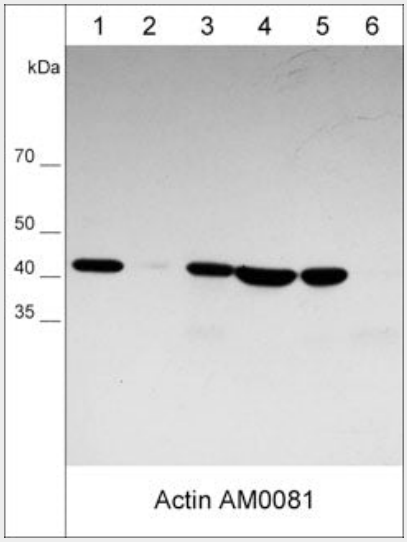
Anti-β-Actin Antibody - Protocols

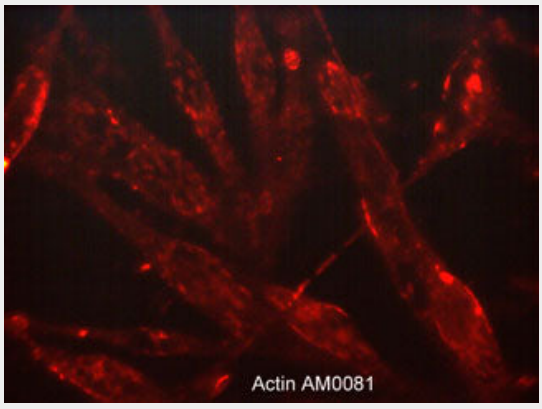
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-β-Actin Antibody - Images



Western blot analysis of human HUVEC-CS (lane 1), rabbit spleen fibroblast (lane 2), human Jurkat (lane 3), human LNCaP (lane 4), human HeLa (lane 5), and mouse F9 (lane 6) cell lysates. The blot was probed with mouse monoclonal anti-β-Actin (AM0081) at 1:1000 (lanes 1-6).



Immunocytochemical labeling of β-Actin in paraformaldehyde fixed human MeWo cells. The cells were labeled with mouse monoclonal anti-β-Actin (clone M008). The antibody was detected using goat anti-mouse DyLight® 594.

Anti-β-Actin Antibody - Background

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adhesion, and morphology. Six different actin isoforms have been identified in vertebrates. There are four α isoforms: skeletal, cardiac, and two smooth muscle (enteric and aortic) actins, along with two cytoplasmic actins (β and γ). Actin exists in two principal forms, globular, monomeric (G) actin, and filamentous polymeric (F) actin. The assembly and disassembly of actin filaments, and also their organization into functional networks, is regulated by a variety of actin-binding proteins (ABPs). Phosphorylation may also be important for regulating actin assembly and interaction with ABPs. In Dictyostelium, phosphorylation of Tyr-53 occurs in response to cell stress and this phosphorylation may alter actin polymerization. In B cells, SHP-1 tyrosine dephosphorylation of actin leads to actin filament depolymerization following BCR stimulation