

#P30002

β -Actin Antibody

□ 100 μ l (20 Western mini-blot)



Orders 400-6123-828

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BACKGROUND

All eukaryotic cells express actin, which often constitutes as much as 50% of total cellular protein. Actin filaments can form both stable and labile structures and are crucial components of microvilli and the contractile apparatus of muscle cells. While lower eukaryotes, such as yeast, have only one actin gene, higher eukaryotes have several isoforms encoded by a family of genes. At least six types of actin are present in mammalian tissues and fall into three classes. α -actin expression is limited to various types of muscle, whereas β - and γ -actin are the principle constituents of filaments in other tissues. Members of the small GTPase family regulate the organization of the actin cytoskeleton. Rho controls the assembly of actin stress fibers and focal adhesion, Rac regulates actin filament accumulation at the plasma membrane and Cdc42 stimulates formation of filopodia.

REFERENCES

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4. Schutt, C.E., Rozycki, M.D., Myslik, J.C. and Lindberg, U. 1995. A discourse on modeling F-Actin. *J. Struct. Biol.* 115: 186-198.
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SOURCE

This Abmart polyclonal antibody is produced by immunizing animals with a synthetic peptide (KLH-coupled) corresponding to amino-terminal residues of human β -actin.

SPECIFICITY

β -Actin Antibody detects endogenous levels of total β -actin protein.

STORAGE

Store the product at -20°C. Stable for one year from the date of shipment.

REACTIVITY

Human, Mouse, Rat, Monkey, D. melanogaster

ISOTYPE

Rabbit IgG

MOLECULAR WEIGHT

42 kDa

IMPORTANT

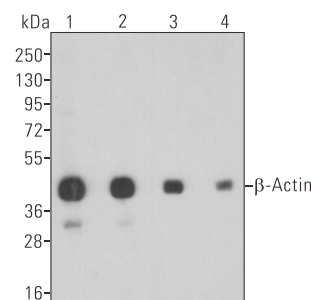
Use an **anti-RABBIT** secondary antibody to detect the antibody.

RECOMMENDED ANTIBODY DILUTIONS

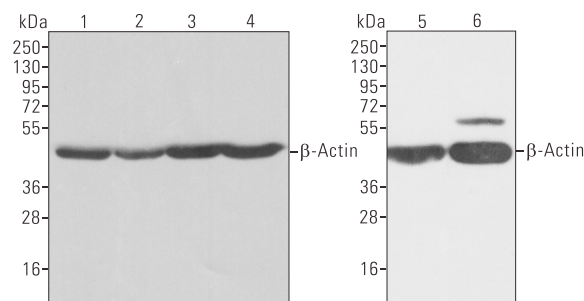
Western blotting 1:2000

*** For Western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1 \times TBS, 0.05% Tween-20 at 4°C with gentle shaking, overnight.**

APPLICATION DATA



Western blot analysis of HeLa whole cell lysate using β -Actin Antibody. The dilutions are 1:1000 (lane1), 1:2000 (lane2), 1:5000 (lane3), 1:10000 (lane4). Each lane was loaded with 20 μ g of HeLa cell lysate.



Western blot analysis of lysates from various cell lines/tissue using β -Actin Antibody (1:2000). Each lane was loaded with 20 μ g (cell lysate) or 30 μ g (tissue) protein. Lane 1: HeLa; Lane 2: 293T; Lane 3: 3T3; Lane 4: COS7; Lane 5: Rat muscle; Lane 6: D. melanogaster.

COMPANION PRODUCTS

#M20005 beta-Tubulin (10B1) Mouse mAb

#M20006 GAPDH (3B3) Mouse mAb

#P30008 GAPDH Antibody

#M21002 Goat Anti-Rabbit IgG-HRP