



β -Actin 说明书（简化版）

(W025-1-1)

试剂编号	试剂组成	规格装量	保存条件
R1	β -Actin（进口分装）	100 μ l	Store at 4°C for one year

For Research Use Only

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.

CHROMOSOMAL LOCATION

Genetic locus: ACTB (human) mapping to 7p15-p12; Actb (mouse) mapping to 5 G2.

SOURCE

β -Actin (C4) is a mouse monoclonal antibody raised against gizzard Actin of chicken origin.

PRODUCT

Each vial contains 20 μ g IgG1 in 100 μ l of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

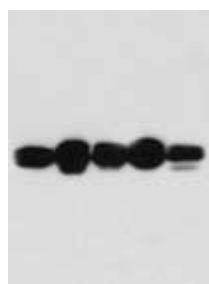
Store at 4°C, ****DO NOT FREEZE****. Stable for one year from the date of shipment.
Non-hazardous.



APPLICATIONS

β -Actin (C4) is recommended for detection of α -Actin of mouse, rat, human, chicken, cow, dog, pig, rabbit, Dictyostelium discoideum and Physarum polycephalum origin by Western Blotting (starting dilution 1:1000, dilution range 1:1000 - 1:10,000), immunoprecipitation [1–2 μ g per 100–500 μ g of total protein (1 ml of cell lysate)], immunofluorescence and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:500, dilution range 1:500 - 1:5000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with all six known isoforms of Actin, including two cytoplasmic forms (β , γ); non cross-reactive with adult cardiac, smooth or skeletal muscle Actin. Molecular Weight of β -Actin: 43 kDa. Positive Controls: C32 whole cell lysate, BC3H1 cell lysate or KNRK whole cell lysate

DATA



β -Actin 43kd

A B C D E

β -Actin (C4): NJJCBIO Western blot analysis of β -Actin expression in HeLa (A), Sol8 (B), C32 (C), NIH/3T3 (D) and KNRK (E) whole cell lysates

REFERENCES

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- 5、Barkalow, K. and Hartwig, J.H. 1995. Actin cytoskeleton. Setting the pace of cell movement. *Curr. Biol.* 5: 1000-1002.