DB070: β-Actin (A11)

Background:

All eukaryotic cell types express actin. The regulation of the actin cytoskeleton is tightly linked to vital biological properties such as polarity, motility, cell-cell contact, exocytosis and proliferation (1&2). While lower eukaryotes such as yeast, have only one actin gene; higher eukaryotes have several isoforms encoded by a family of genes (3&4). At least six types of actin are present in mammalian tissues and fall into three classes (5). Alpha-actin expression is limited to various types of muscle, whereas beta and gamma are the principle constituents of filaments in other tissues (6).

Origin:

β-Actin (A11) is provided as an affinity purified rabbit polyclonal antibody, raised against a peptide mapping to the amino terminal domain of human β-Actin.

Product Details:

Each vial contains 200 µg/ml of affinity purified rabbit IgG, β-Actin (A11) DB070, in 1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

Competition Studies:

A blocking peptide is also available, DB070P, for use in competition studies. Each vial contains 100 µg of peptide in 0.5 ml PBS with 0.1% sodium azide and 100 µg BSA.

Specificity:

β-Actin (A11) is recommended to detect mouse, rat, and human β-Actin by western blotting and immunohistochemistry. Recommended western blotting starting dilution 1:200.

Storage:

Store this product at 4º C, do not freeze. The product is stable for one year from the date of shipment.

References:

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3. Doolittle RF. 1995. The origins and evolution of eukaryotic proteins. Philos Trans Royal Soc London Biol Sci. 349(1329):235-240.
4. Maccioni RB and Cambiazo V. 1995. Role of microtubule-associated proteins in the control of microtubule assembly. Physiol Rev. 75(4):835-864.
5. Schutt CE, Rozycki MD, Myslik JC, Lindberg U. 1995. A discourse on modeling F-actin. J. Struct. Biol. 115:186-198.
6. Barkalow K and Hartwig JH. 1995. Actin cytoskeleton. Setting the pace of cell movement. Curr Biol. 5(9):1000-1002.

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