

Beta-Actin polyclonal antibody

Version: 1.1

Catalog No.: SWSPA001

Background: Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. β -actin (gene name ACTB) is one of the two non-muscle cytoskeletal actins, molecular weight is 43 kDa. β -actin gene is often stably and constitutively expressed at high levels in most tissues and cells.

Proteins such as β -actin, involved in maintenance of basic cellular function, are often referred to as housekeeping proteins that are frequently used as loading controls for western blots and protein normalization.

Description: A highly specific and sensitive rabbit polyclonal antibody against β -actin.

Source: KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human beta-actin.

Applications: WB 1:1000-2000, ICH 1:500-2000. Optimal dilution has to be determined by the user.

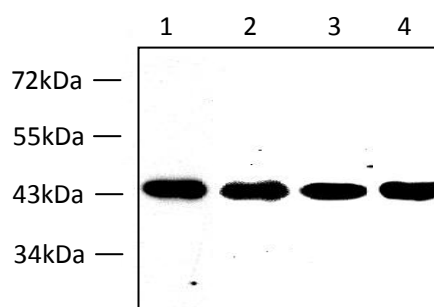
Applicable Species: mouse, rat, human.

Specifications: Each vial contains 0.1 mg IgG in 0.1 ml (1 mg/ml) of PBS pH7.4, 0.5% BSA with 0.05% sodium azide. Antibody was purified by affinity chromatography.

Storage conditions: store at 2-8°C for 3 months, -20°C for 1 year. To avoid freeze-thaw cycles, reconstituted antibody should be aliquoted before freezing for short-term storage (-20°C) or for long-term storage (-80°C).

Note: For research use only, not for use in diagnostic procedures.

Data:



Western blot analysis of β -Actin expression in Rat liver (1), HeLa (2), Sp/20 (3) and NIH/3T3 (4) whole cell lysates.

References:

1. Doolittle, R.F. 1995. The origins and evolution of eukaryotic proteins. *Philos. Trans. R. Soc. Lond., B, Biol. Sci.* 349: 235-240.
2. Maccioni, R.B., et al. 1995. Role of microtubule associated proteins in the control of microtubule assembly. *Physiol. Rev.* 75: 835-864.
3. Schutt, C.E., et al. 1995. A discourse on modeling F-actin. *J. Struct. Biol.* 115: 186-198.
4. Barkalow, K., et al. 1995. Actin cytoskeleton. Setting the pace of cell movement. *Curr. Biol.* 5: 1000-1002.
5. Graf, R., et al. 1996. Elastic fibres are an essential component of human placental stem villous stroma and an integrated part of the perivascular contractile sheath. *Cell Tissue Res.* 283: 133-141.