ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

LIFE TECH Life Technologies™ Your Molecular & Cell Technology Partner

Human Beta-Actin Antibodies

Cat. # ACTB16-N	**Purified** Human Beta-Actin protein control for ELISA	**SIZE**: 100 ug
Cat. # ACTB16-N-1	**Purified** Human Beta-Actin protein control for ELISA	**SIZE**: 1 mg

Actin and myosin are the two major cytoskeleton proteins implicated in cellular movement, secretion, phagocytosis, and kinesis. Actin is one of the most conserved cellular protein. At least 6 actin isoforms have been identified by protein sequence analyses. Four actin isoforms represent the differentiation markers of muscle tissues. There are three α-actins: α-skeletal, α-cardiac, and α-smooth muscle), one **β**-actin (**β**-non-muscle), and two γ-actins (γ-smooth muscle and γ-non-muscle). Actin isoform are >90% conserved, except in the N-terminal 18-aa (50-60% homology). Beta-actin protein and mRNA levels are often used as a reference for comparing changes in cellular protein/mRNA levels by Western blots.

Source of Antigen

Human beta-actin (mol wt ~43 kda) was purified platelets cells (>99%, cat # ACTB16-N). The purified preparation may contain traces of gamma-actin. Purified protein is supplied in 5 mM Tris, pH 8, 0.2 mM CaCl2, 0.2mM ATP, 5% (w/v) sucrose, and 1% (w/v) dextran in liquid at 1 mg/ml or in powder form. The product (Cat # ACTB16-N) is available in 100 ug/100 ul/via (liquid or powder). Reconstitute the powder in 100 ul water to prepare 1 mg/ml stock. The product is also available in 1 mg powder/vial (Cat # ACB16-N-1).

Form & Storage of Antibodies/Peptide Control

Storage

Short-term: unopened, undiluted liquid vials for less than a week at 4oC.

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Store powder at –20oC for 6-12 months.

Stability: 6-12 months at –20oC or below.
Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting; Prepare beta-actin solution in SDS-PAGE sample buffer (reduced) and load as needed (100-500 ng/lane) and detected using appropriate antibodies.

ELISA: Control protein can be used to coat ELISA plates at 1 ug/ml and detected with antibodies.

Biological activity: If the protein is stored and used properly can be used for biological assay. We have not established biological activity and users are advised to develop specific protocols. use 1 mg vial that is sent in powder form and it is more suitable for biological assay due to handling and storage of the product.

References:

(1). Ohmuri H (1995) Gene Accession # S38782; Vandekerchove, J et al (1978) Eur. J. Biochem. 90, 451; Lessard J et al (1988) Cell. Motil Cytoskel. 10, 349; North JA et al (1994) J. Cell Sci. 107, 437;

*This product is for In vitro research use only.

Antibodies to beta-actin (poly and mono) are available.

Antibodies to G3PDH

ACTB16-N 70809A

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