

Active Native Human ACTB

Cat. No. ACTB-325H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Non-muscle actin has been purified from human platelets. The isotype composition of non-muscle actin is 85% β -actin and 15% γ -actin.
Species	Human
Source	Human Platelets
Description	This gene encodes one of six different actin proteins. Actins are highly conserved proteins that are involved in cell motility, structure, and integrity. This actin is a major constituent of the contractile apparatus and one of the two nonmuscle cytoskeletal actins.
Form	The product is provided as a lyophilized white powder.
Bio-activity	The biological activity of non-muscle actin can be determined by its ability to efficiently polymerize into filaments in vitro and separate from unpolymerized components in a spin down assay. Stringent quality control ensures that >85% of the non-muscle actin can polymerized in this assay.
Molecular Mass	Non-muscle actin has an approximate molecular weight of 43 kDa.
Purity	Protein purity is determined by scanning densitometry of Coomassie Blue stained protein on a 12% polyacrylamide gel. Non-muscle actin was found to be >99% pure.
Applications	Identification and characterization of non-muscle actin binding proteins; In vitro actin

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polymerization studies; Antibody standard for Western blot analysis

Storage

Briefly centrifuge to collect the product at the bottom of the tube. The lyophilized protein is stable for 6 months when stored desiccated to <10% humidity at 4°C.

Reconstitution

The protein should be reconstituted to 10 mg/ml with 100 ul of distilled water, it will then be in the following buffer: 5 mM Tris-HCl pH 8.0, 0.2 mM CaCl₂, 0.2 mM ATP, 5% (w/v) sucrose, and 1% (w/v) dextran.

GENE INFORMATION

Gene Name

[ACTB actin, beta \[Homo sapiens \(human\) \]](#)

Official Symbol

ACTB

Synonyms

ACTB; BRWS1; PS1TP5BP1; actin, beta; actin, cytoplasmic 1; beta cytoskeletal actin; PS1TP5-binding protein 1

Gene ID

[60](#)

mRNA Refseq

[NM_001101](#)

Protein Refseq

[NP_001092](#)

MIM

[102630](#)

UniProt ID

P60709

Chromosome Location

7p22

Pathway

Adherens junction; Arrhythmogenic right ventricular cardiomyopathy; Bacterial

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invasion of epithelial cells

Function

Tat protein binding; kinesin binding; nitric-oxide synthase binding

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