

## Active Native Human ACTB

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

### SPECIFICATION

<b>Product Overview</b>	Non-muscle actin has been purified from human platelets. The isotype composition of non-muscle actin is 85% $\beta$ -actin and 15% $\gamma$ -actin.
<b>Species</b>	Human
<b>Source</b>	Human Platelets
<b>Description</b>	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.
<b>Form</b>	The product is provided as a lyophilized white powder.
<b>Bio-activity</b>	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.
<b>Molecular Mass</b>	Non-muscle actin has an approximate molecular weight of 43 kDa.
<b>Purity</b>	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.
<b>Applications</b>	Identification and characterization of non-muscle actin binding proteins; In vitro actin

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

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 CaCl<sub>2</sub>, 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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



invasion of epithelial cells

**Function**

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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA