

## Recombinant Human ACTG1 protein, His-tagged

**Cat. No.** ACTG1-6898H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Human ACTG1 aa. (Met1~Phe375) fused with N-terminal His tag was produced in E. coli cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>ProteinLength</b>    | Met1~Phe375                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Description</b>      | Actins are highly conserved proteins that are involved in various types of cell motility, and maintenance of the cytoskeleton. In vertebrates, three main groups of actin isoforms, alpha, beta and gamma have been identified. The alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. The beta and gamma actins co-exist in most cell types as components of the cytoskeleton, and as mediators of internal cell motility. Actin, gamma 1, encoded by this gene, is a cytoplasmic actin found in non-muscle cells. Mutations in this gene are associated with DFNA20/26, a subtype of autosomal dominant non-syndromic sensorineural progressive hearing loss. Alternative splicing results in multiple transcript variants. |
| <b>Form</b>             | Freeze-dried powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Molecular Mass</b>   | 43kDa as determined by SDS-PAGE reducing conditions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Endotoxin</b>        | <1.0EU per 1ug (determined by the LAL method)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

 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

|                       |                                                                                                                                                                                                                                                                                                                                     |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>         | >95%                                                                                                                                                                                                                                                                                                                                |
| <b>Characteristic</b> | The isoelectric point is 5.6.                                                                                                                                                                                                                                                                                                       |
| <b>Applications</b>   | SDS-PAGE; WB; ELISA; IP; CoIP; Purification; Amine Reactive Labeling.                                                                                                                                                                                                                                                               |
| <b>Stability</b>      | The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition. |
| <b>Storage</b>        | Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.                                                                                                                                                                                                                          |
| <b>Concentration</b>  | 200ug/mL                                                                                                                                                                                                                                                                                                                            |
| <b>Storage buffer</b> | PBS, pH7.4, containing 1mM DTT, 5% trehalose, 0.01% sarcosyl and Proclin300.                                                                                                                                                                                                                                                        |
| <b>Reconstitution</b> | Reconstitute in PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.                                                                                                                                                                                                                                                     |

## GENE INFORMATION

|                        |                                                                                                                                                                                             |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | ACTG1 actin gamma 1 [ Homo sapiens (human) ]                                                                                                                                                |
| <b>Official Symbol</b> | ACTG1                                                                                                                                                                                       |
| <b>Synonyms</b>        | ACT; ACTG; BRWS2; DFNA20; DFNA26; HEL-176; cytoskeletal gamma-actin; deafness, autosomal dominant 20; deafness, autosomal dominant 26; epididymis luminal protein 176; actin, cytoplasmic 2 |
| <b>Gene ID</b>         | 71                                                                                                                                                                                          |

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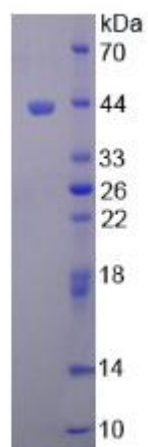
 45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq [NM\\_001199954.1](#)

Protein Refseq [NP\\_001186883.1](#)

UniProt ID [P63261](#)

SDS-PAGE



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