

## Product datasheet for **TP301730**

### gamma Actin (ACTG1) (NM\_001614) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human actin, gamma 1 (ACTG1), 20 µg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA Clone  
or AA Sequence:** >RC201730 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MEEEIAALVIDNGSGMCKAGFAGDDAPRAVFPVGRPRRHQGVVMVGMGQKDSYVGDEAQSQRGILTLKYP  
IEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPVLLTEAPLNPKANREKMTQIMFETFNTPAMYVAIQAVL  
SLYASGRTTGIVMDSGDGVTHTVPIYEGYALPHAILRLDLAGRDLTDYLMKILTERGYSFTTTAEREIVR  
DIKEKLCYVALDFEQEMATAASSSSLEKSYELPDGQVITIGNERFRCPEALFQPSFLGMESCGIHETTFN  
SIMKCDVDIRKDLYANTVLSGGTTMYPGIADRMQKEITALAPSTMKIKIIPPERKYSVWIGGSILASLS  
TFQQMWISKQEYDESGPSIVHRKCF

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK

**Predicted MW:** 41.6 kDa

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

**Storage:** Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** [NP\\_001605](#)

**Locus ID:** 71



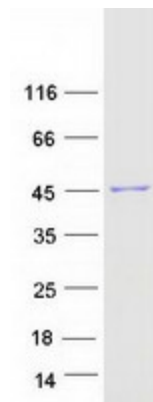
[View online »](#)

|               |                                    |
|---------------|------------------------------------|
| UniProt ID:   | <a href="#">P63261</a>             |
| RefSeq Size:  | 2004                               |
| Cytogenetics: | 17q25.3                            |
| RefSeq ORF:   | 1125                               |
| Synonyms:     | ACT; ACTG; DFNA20; DFNA26; HEL-176 |

**Summary:** Actins are highly conserved proteins that are involved in various types of cell motility and in maintenance of the cytoskeleton. Three main groups of actin isoforms have been identified in vertebrate animals: alpha, beta, and gamma. 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 all cell types. Mutations in this gene are associated with DFNA20/26, a subtype of autosomal dominant non-syndromic sensorineural progressive hearing loss and also with Baraitser-Winter syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2017]

**Protein Pathways:** Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, Focal adhesion, Hypertrophic cardiomyopathy (HCM), Leukocyte transendothelial migration, Pathogenic Escherichia coli infection, Regulation of actin cytoskeleton, Tight junction, Vibrio cholerae infection, Viral myocarditis

### Product images:



Coomassie blue staining of purified ACTG1 protein (Cat# TP301730). The protein was produced from HEK293T cells transfected with ACTG1 cDNA clone (Cat# [RC201730]) using MegaTran 2.0 (Cat# [TT210002]).