

Product datasheet for PH301730

gamma Actin (ACTG1) (NM_001614) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	ACTG1 MS Standard C13 and N15-labeled recombinant protein (NP_001605)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC201730
Predicted MW:	41.8 kDa
Protein Sequence:	>RC201730 protein sequence Red=Cloning site Green=Tags(s)
	MEEEIAALVIDNGSGMCKAGFAGDDAPRAVFPISIVGRPRHQGMVGMGQKDSYVGDEAQSIRGILTLKYP IEHGIVTNWDDMEKIWHHTFYNELRVAPPEEHPVLLTEAPLNPKANREKMTQIMFETFNTPAMYVAIQAVL SLYASGRTTGIVMDSGDGVTHTVPIYEGYALPHAILRLDLAGRDLTDYLMKILTERGYSFTTTAEREIVR DIKEKLCYVALDFEQEMATAASSSSLEKSYELPDGQVITIGNERFRCPEALFQPSFLGMESCGIHETTFN SIMKCDVDIRKDLANTVLSGGTTMYPGIADRMQKEITALAPSTMKIKIIAPPERKYSVWIGGSILASLS TFQQMWISKQEYDESGPSIVHRKCF
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_001605
RefSeq Size:	2004
RefSeq ORF:	1125
Synonyms:	ACT; ACTG; DFNA20; DFNA26; HEL-176
Locus ID:	71



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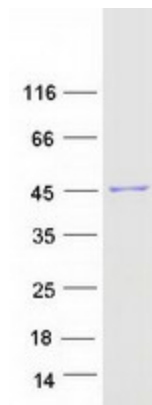
UniProt ID: [P63261](#)

Cytogenetics: 17q25.3

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]).