

## Product datasheet for TP304924

### alpha Actinin (ACTN1) (NM\_001102) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human actinin, alpha 1 (ACTN1), transcript variant 2, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC204924 protein sequence Red=Cloning site Green=Tags(s)

MDHYDSQQTNDYMQPEEDWDRDLLLPAWEKQQRKFTAWCNSHLRKAGTQIENIEEDFRDGLKMLLLE  
VISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEEIVDGNVKMTLGMIVTIILRFAIQDIS  
VEETSAKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGFCALIHRRPELIDYGKLRKDDPLTNLNTAFD  
VAEKYLDIPKMLDAEDIVGTARPDEKAIMTYVSSFYHAFSGAQAETAANRICKVLAVNQENEQLMEDYE  
KLASDLLEWIRRTIPWLENRVPMTHAMQQKLEDFRDYRRLHKPPKVQEKCLEINFNTLQTKLRLSNR  
PAFMPSEGRMVSDINNAWGCLEQVEKGYEELLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMLRLQ  
K  
DYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYYDPSVSNARCQKICDQWDNLGALT  
QKRREALERTEKLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVHTIEEQGLTTAHEQFKATLPD  
ADKERLAILGIHNEVSKIVQTYHVN MAGTNPYTTITPQINGKWDHVRQLVPRRDQALTEEHARQQHNER  
LRKQFGAQANVIGPWIQTKMEEIGRISIEMHGTLEDQLSHLRQYEKSIVNYKPKIDQLEGDHQLIQEALI  
FDNKHTNYTMEHIRVGWEQLLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLGPEE  
FKACLISLGYDIGNDPQGEAEFARIMSIVDPNRLGVVTFQAFIDFMSRETADTDTADQVMASFKILAGDK  
NYITMDELRRLEPPDQAEYCIARMAPYTGPDVSPGALDYMSFSTALYGESDL

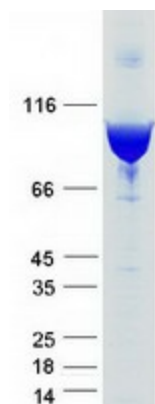
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	102.9 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



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<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_001093</a>
<b>Locus ID:</b>	87
<b>UniProt ID:</b>	<a href="#">P12814</a>
<b>RefSeq Size:</b>	3743
<b>Cytogenetics:</b>	14q22-q24
<b>RefSeq ORF:</b>	2676
<b>Synonyms:</b>	BDPLT15
<b>Summary:</b>	Alpha actinins belong to the spectrin gene superfamily which represents a diverse group of cytoskeletal proteins, including the alpha and beta spectrins and dystrophins. Alpha actinin is an actin-binding protein with multiple roles in different cell types. In nonmuscle cells, the cytoskeletal isoform is found along microfilament bundles and adherens-type junctions, where it is involved in binding actin to the membrane. In contrast, skeletal, cardiac, and smooth muscle isoforms are localized to the Z-disc and analogous dense bodies, where they help anchor the myofibrillar actin filaments. This gene encodes a nonmuscle, cytoskeletal, alpha actinin isoform and maps to the same site as the structurally similar erythroid beta spectrin gene. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
<b>Protein Families:</b>	Druggable Genome, ES Cell Differentiation/IPS
<b>Protein Pathways:</b>	Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Focal adhesion, Leukocyte transendothelial migration, Regulation of actin cytoskeleton, Systemic lupus erythematosus, Tight junction

**Product images:**

Coomassie blue staining of purified ACTN1 protein (Cat# TP304924). The protein was produced from HEK293T cells transfected with ACTN1 cDNA clone (Cat# [RC204924]) using MegaTran 2.0 (Cat# [TT210002]).