

Product datasheet for PH302873

alpha Actinin 4 (ACTN4) (NM_004924) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	ACTN4 MS Standard C13 and N15-labeled recombinant protein (NP_004915)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC202873
Predicted MW:	104.9 kDa
Protein Sequence:	>RC202873 protein sequence Red=Cloning site Green=Tags(s)

MVDYHAANQSYQYGPSSAGNGAGGGGSMGDYMAQEDDWRDLLLDPAWEKQQRKFTTAWCNSHLRKAGTQ
IENIDEDFRDGLKMLLLLEVISGERLPKPERGKMRVHKINNVNKALDFIASKGVKLVSIGAEEIVDGNK
MTLGMIIWTIILRFQIDISVEETSAKEGLLLWCQRKTAPYKNNVQNFHISWKDGLAFNALIHRHRPELI
EYDKLRKDDPVTNLNNAFEVAEKYLDIPKMLDAEDIVNTARPDEKAIMTYVSSFYHAFSGAQAETAANR
ICKVLAVNQENEHLMEDYEKLASDLEWIRRTIPWLEDVRPQKTIQEMQKLEDFRDYRRVHKPPKVQEK
CQLEINFNTLQTKLRLSNRPAFMPSEGKMSVSDINNGWQHLEQAEGYEEWLLNEIRRLERLDHLAEKFRQ
KASIEAWTDGKEAMLKHRDYETATLSDIKALIRKHEAFESDLAAHQDRVEQIAAIAQELNELDYDSSH
VNTRCQKICDQWDALGSLTHSRREALTEKQLEAIDQLHLEYAKRAAPFNNWMEAMEDLQDMFIVHTI
EEIEGLISAHDQFKSTLPDADREREAIALAIHKEAQRIAESNHIKLSGNSPYTTVTPQIINSKWEKVQQLV
PKRDHALLLEEQSQSNEHLRRQFASQANVVGPIQTKMEEIGRISIEMNGTLEDQLSHLKQYERSIVDY
KPNLDLLEQQHQLIQEALIFDNKHTNYTMEHIRVGEQLLTTIARTINEVENQILTRDAKGISQEQMQUEF
RASFNHFDKDHGGALGPEEFKACLSLGYDVENDRQGEAEFNRIMSLVDPNHSGLVTFQAFIDFMSRETT
D TDTADQVIASFVKLAGDKNFITAEELRRELPPDQAEYCIARMAPYQGPDAVPGALDYKSFSTALYGESD
L

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

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.



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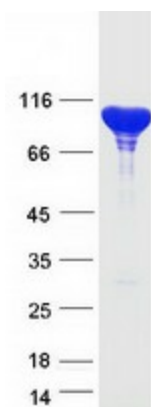
RefSeq:	NP_004915
RefSeq Size:	3966
RefSeq ORF:	2733
Synonyms:	ACTININ-4; FSGS; FSGS1
Locus ID:	81
UniProt ID:	O43707 , A0A0S2Z3G9
Cytogenetics:	19q13.2

Summary: 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, alpha actinin isoform which is concentrated in the cytoplasm, and thought to be involved in metastatic processes. Mutations in this gene have been associated with focal and segmental glomerulosclerosis. [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome

Protein Pathways: 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 ACTN4 protein (Cat# [TP302873]). The protein was produced from HEK293T cells transfected with ACTN4 cDNA clone (Cat# [RC202873]) using MegaTran 2.0 (Cat# [TT210002]).