

Product datasheet for TP302873L

OriGene Technologies, Inc.

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alpha Actinin 4 (ACTN4) (NM_004924) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human actinin, alpha 4 (ACTN4), 1 mg

Species: Human Expression Host: HEK293T

Expression cDNA Clone or AA Sequence: >RC202873 protein sequence Red=Cloning site Green=Tags(s)

MVDYHAANQSYQYGPSSAGNGAGGGGSMGDYMAQEDDWDRDLLLDPAWEKQQRKTFTAWCNSHLRKAGTQ

IENIDEDFRDGLKLMLLLEVISGERLPKPERGKMRVHKINNVNKALDFIASKGVKLVSIGAEEIVDGNAK MTLGMIWTIILRFAIQDISVEETSAKEGLLLWCQRKTAPYKNVNVQNFHISWKDGLAFNALIHRHRPELI EYDKLRKDDPVTNLNNAFEVAEKYLDIPKMLDAEDIVNTARPDEKAIMTYVSSFYHAFSGAQKAETAANR ICKVLAVNQENEHLMEDYEKLASDLLEWIRRTIPWLEDRVPQKTIQEMQQKLEDFRDYRRVHKPPKVQEK CQLEINFNTLQTKLRLSNRPAFMPSEGKMVSDINNGWQHLEQAEKGYEEWLLNEIRRLERLDHLAEKFRQ KASIHEAWTDGKEAMLKHRDYETATLSDIKALIRKHEAFESDLAAHQDRVEQIAAIAQELNELDYYDSHN VNTRCQKICDQWDALGSLTHSRREALEKTEKQLEAIDQLHLEYAKRAAPFNNWMESAMEDLQDMFIVHTI EEIEGLISAHDQFKSTLPDADREREAILAIHKEAQRIAESNHIKLSGSNPYTTVTPQIINSKWEKVQQLV PKRDHALLEEQSKQQSNEHLRRQFASQANVVGPWIQTKMEEIGRISIEMNGTLEDQLSHLKQYERSIVDY KPNLDLLEQQHQLIQEALIFDNKHTNYTMEHIRVGWEQLLTTIARTINEVENQILTRDAKGISQEQMQEF RASFNHFDKDHGGALGPEEFKACLISLGYDVENDRQGEAEFNRIMSLVDPNHSGLVTFQAFIDFMSRETT DTDTADQVIASFKVLAGDKNFITAEELRRELPPDQAEYCIARMAPYQGPDAVPGALDYKSFSTALYGESD

L

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK Predicted MW: 104.7 kDa

Concentration: $>0.05 \mu g/\mu L$ 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

Bioactivity: WB positive control (PMID: <u>27080942</u>)





alpha Actinin 4 (ACTN4) (NM_004924) Human Recombinant Protein - TP302873L

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 004915

Locus ID: 81

UniProt ID: <u>043707</u>, <u>A0A0S2Z3G9</u>

RefSeq Size: 3966 Cytogenetics: 19q13.2 RefSeq ORF: 2733

Synonyms: ACTININ-4; FSGS; FSGS1

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

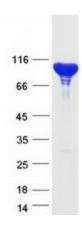
Protein Pathways: Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Focal adhesion,

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]).