

# Active Recombinant Full Length Human ACTN4 Protein, C-Flag-tagged

Cat. No. ACTN4-390HFL Lot. No. (See product label)

## SPECIFICATION

### Product Overview

Recombinant Full Length Human ACTN4 Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.

### Species

Human

### Source

Mammalian Cells

### ProteinLength

1-911 a.a.

### Description

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.

### Form

25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.

### Bio-activity

WB positive control

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<b>Molecular Mass</b>	104.7 kDa
<b>AA Sequence</b>	<p>MVDYHAANQSYQYGPSSAGNGAGGGGSMGDYMAQEDDWRDLLLLDPAWEKQQ  RKTFTAWCNSHLRKAGTQ IENIDEDFRDGLKMLLLEVISGERLPKPERGKMRVHKI  NNVNKALDFIASKGVKLVSIGAEEIVDGNAMTLGMIWTIILRFAIQDISVEETSAKEG  LLLWCQRKTAPYKNVNVQNFHISWKDGLAFNALIHRHRPELI EYDKLRKDDPVNTLN  NAFEVAEKYLDIPKMLDAEDIVNTARPDEKAIMTYVSSFYHAFSGAQAETAANR ICK  VLAVNQENEHLMEDYEKLASDLLEWIRRTIPWLEDRVPQKTIQEMQQKLEDFRDYR  RVHKPPKVQEK CQLEINFNTLQTKLRLSNRPAFMPSEGKMSDINNGWQHLEQAE  KGYEEWLLNEIRRLERLDHLAEKFRQ KASIHEAWTDGKEAMLKHRDYETATLSDIKA  LIRKHEAFESDLAAHQDRVEQIAAIAQELNELDYDSDHN VNTRCQKICDQWDALGSL  THSRREALEKTEKQLEAIDQLHLEYAKRAAPFNNWMSAMEDLQDMFIVHTI EEIEG  LISAHDQFKSTLPDADREREAILAIHKEAQRIAESNHKLSGSPYTTVTPQIINSKWEK  VQQLV PKRDHALLEEQSKQSQSNEHLRRQFASQANVVGVPWIQTKMEEIGRISIEMNG  TLEDQLSHLKQYERSIVDY KPNLDLLEQQHQLIQEALIFDNKHTNYTMEHIRVGWEQ  LLTTIARTINEVENQILTRDAKGISQEQMQEF RASFNFHFDKDHGGALGPEEFKACLIS  LGYDVENDRQGEAEFNRIMSLVDPNHSGLVTFQAFIDFMSRETT DTDADQVIASFK  VLAGDKNFITAEELRRELPPDQAEYCIARMAPYQGPDAVPGALDYKSFSTALYGESD  LTRTRPLEQKLISEEDLAANDILDYKDDDDKV</p>
<b>Purity</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining.
<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>Storage</b>	Store at -80 centigrade.
<b>Concentration</b>	>50 ug/mL as determined by microplate BCA method.
<b>Preparation</b>	Recombinant protein was captured through anti-DDK affinity column followed by

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conventional chromatography steps.

**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

**Full Length** Full L.

## GENE INFORMATION

**Gene Name** [ACTN4 actinin alpha 4 \[ Homo sapiens \(human\) \]](#)

**Official Symbol** [ACTN4](#)

**Synonyms** FSGS; FSGS1; ACTININ-4

**Gene ID** [81](#)

**mRNA Refseq** [NM\\_004924.6](#)

**Protein Refseq** [NP\\_004915.2](#)

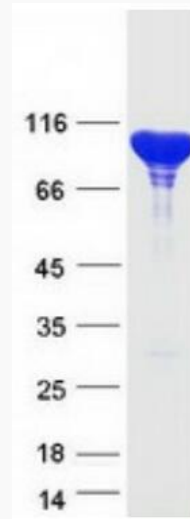
**MIM** [604638](#)

**UniProt ID** [O43707](#)

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Coomassie blue staining of purified ACTN4 protein.

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