

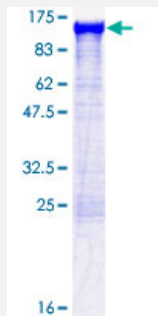
Full-Length

ACTN1 (Human) Recombinant Protein (P01)

Catalog # H00000087-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human ACTN1 full-length ORF (NP_001093.1, 1 a.a. - 892 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MDHYDSQQTNDYMQPEEDWDRDLLLDPWEKQQRKTFTAWCNSHLRKAGTQIENIEEDFRDGL
KLMILLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEEVDGNVKMTLGMWITIL
RFAIQDISVEETSAKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGFCALIIHRHRPELIDYGKLRKD
DPLTNLNTAFDVAEKYLDIPKMLDAEDIVGTARPDEKAIMTYVSSFYHAFSGAQKAETAANRICKVL
AVNQENEQLMEDYEKLASDLLEWIRRTIPWLENRVPENTMHAMQQKLEDFRDYRRLHKPPKVQE
KCQLEINFNTLQTKLRLSNRPAFMPSEGRMVSDINNAWGCLEQVEKGYEEWLLNEIRRLERLDHL
AEKFRQKASIHEAWTDGKEAML RQKDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQEL
NELDYDPSVSNARCQKICDQWDNLGALTQKRREALERTEKLETTIDQLYLEYAKRAAPFNNWME
GAMEDLQDTFIVHTIEEIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVN MAGTNPYTTI
TPQEINGKWDHVRQLVPRRDQALTEE HARQQHNERLRKQFGAQANVIGPWQTKMEEIGRISIEMH
GTLEDQLSHLRQYEKSMVNYKPKIDQLEGDHQLIQEALIFDNKHTNYTMEHIRVGWEQLLTTIARTINE
VENQILTRDAKGISQEQMNEFRASFNFHFRDRHSGTLGPEEFKACLISLGYDIGNDPQGAEAFARIM
SVDPNRLGVVTFQAFIDFMSRETADTDADQVMASFKILAGDKNYITMDELRRLEPPDQAEYCIAR
MAPYTGPDSPVPGALDYMSFSTALYGESDL

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

129.5

Interspecies Antigen Sequence

Mouse (99); Rat (99)

Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — ACTN1

Entrez GeneID	87
GeneBank Accession#	NM_001102.2
Protein Accession#	NP_001093.1
Gene Name	ACTN1
Gene Alias	FLJ40884
Gene Description	actinin, alpha 1
Omim ID	102575
Gene Ontology	Hyperlink

Gene 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, 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]

Other Designations

F-actin cross-linking protein|actinin 1 smooth muscle|alpha-actinin 1

Pathway

- [Adherens junction](#)
- [Arrhythmogenic right ventricular cardiomyopathy \(ARVC\)](#)
- [Focal adhesion](#)
- [Leukocyte transendothelial migration](#)
- [Regulation of actin cytoskeleton](#)
- [Systemic lupus erythematosus](#)
- [Tight junction](#)

Disease

- [Cleft Lip](#)
- [Cleft Palate](#)