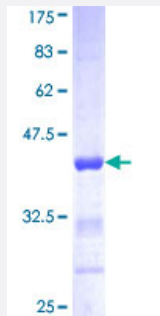


ACTN1 (Human) Recombinant Protein (Q01)

Catalog # H00000087-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human ACTN1 partial ORF (NP_001093, 543 a.a. - 639 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	<p> EIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVNLMAGTNPYTTITPQEINGKWDHVRQL VPRRDQALTEEHARQQHNERLRKQFGAQA </p>
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.41
Interspecies Antigen Sequence	Mouse (100); 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](#)

Protein Accession# [NP_001093](#)

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](#)