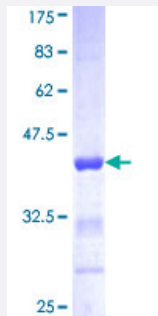


# ACTN1 (Human) Recombinant Protein (Q01)

Catalog # H00000087-Q01

Size 25 ug, 10 ug

## Applications



## Specification

<b>Product Description</b>	Human ACTN1 partial ORF ( NP_001093, 543 a.a. - 639 a.a.) recombinant protein with GST-tag at N-terminal.
<b>Sequence</b>	<p>           EIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVNLMAGTNPYTTITPQEINGKWDHVRQL            VPRRDQALTEEHARQQHNERLRKQFGAQA         </p>
<b>Host</b>	Wheat Germ (in vitro)
<b>Theoretical MW (kDa)</b>	36.41
<b>Interspecies Antigen Sequence</b>	Mouse (100); Rat (99)
<b>Preparation Method</b>	<a href="#">in vitro wheat germ expression system</a>
<b>Purification</b>	Glutathione Sepharose 4 Fast Flow
<b>Quality Control Testing</b>	12.5% SDS-PAGE Stained with Coomassie Blue.
<b>Storage Buffer</b>	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
<b>Storage Instruction</b>	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
<b>Note</b>	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](#)