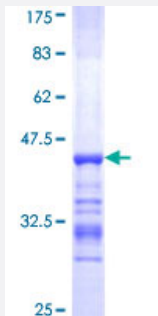


ACTN4 (Human) Recombinant Protein (Q01)

Catalog # H00000081-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human ACTN4 partial ORF (NP_004915, 592 a.a. - 701 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	KEAQRIAESNHIKLSGSNPYTTVTPQIINSKWEKVQQLVPKRDHALLEEQSKQQSNEHLRRQFASQ ANVVG PWIQT KMEEIGRISIEMNGTLEDQLSHLKQYERSIVDYK
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	37.84
Interspecies Antigen Sequence	Mouse (99); Rat (98)
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 — ACTN4

Entrez GeneID [81](#)

GeneBank Accession# [NM_004924](#)

Protein Accession# [NP_004915](#)

Gene Name ACTN4

Gene Alias ACTININ-4, DKFZp686K23158, FSGS, FSGS1

Gene Description actinin, alpha 4

Omim ID [603278](#) [604638](#)

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, alpha actinin isoform which is concentrated in the cytoplasm, and is thought to be involved in metastatic processes. Mutations in this gene have been associated with focal and segmental glomerulosclerosis. [provided by RefSeq]

Other Designations actinin alpha4 isoform

Pathway

- [Adherens junction](#)

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

Disease

- [Alport syndrome](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Diabetic Nephropathies](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Glomerulosclerosis](#)
- [Kidney Diseases](#)
- [Proteinuria](#)