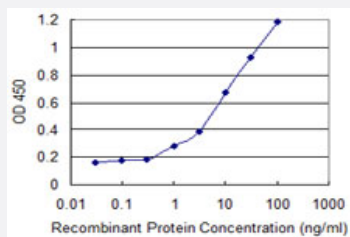


# ACTN4 monoclonal antibody (M02), clone 1E10

Catalog # H00000081-M02

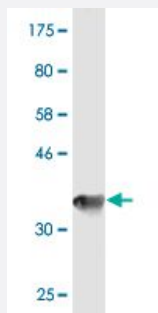
Size 100 ug

## Applications



### Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged ACTN4 is 0.3 ng/ml as a capture antibody.



Western Blot detection against Immunogen (37.84 KDa) .

## Specification

|                            |                                                                                                                      |
|----------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b> | Mouse monoclonal antibody raised against a partial recombinant ACTN4.                                                |
| <b>Immunogen</b>           | ACTN4 (NP_004915, 592 a.a. ~ 701 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.   |
| <b>Sequence</b>            | KEAQRIAESNHIKLSGSNPYTTVTPQIINSKWEKVQQLVPKRDHALLEEQSKQQSNEHLRRQFASQ<br>ANVVG PWIQT KMEEIGRISIEMNGTLEDQLSHLKQYERSIVDYK |
| <b>Host</b>                | Mouse                                                                                                                |
| <b>Reactivity</b>          | Human                                                                                                                |

|                               |                                                                                                          |
|-------------------------------|----------------------------------------------------------------------------------------------------------|
| Interspecies Antigen Sequence | Mouse (99); Rat (98)                                                                                     |
| Isotype                       | IgG2a                                                                                                    |
| Quality Control Testing       | Antibody Reactive Against Recombinant Protein.<br>Western Blot detection against Immunogen (37.84 KDa) . |
| Storage Buffer                | In 1x PBS, pH 7.4                                                                                        |
| Storage Instruction           | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.                                 |

## Applications

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged ACTN4 is 0.3 ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

## Gene Info — ACTN4

|                     |                                        |
|---------------------|----------------------------------------|
| Entrez GeneID       | <a href="#">81</a>                     |
| GeneBank Accession# | <a href="#">NM_004924</a>              |
| Protein Accession#  | <a href="#">NP_004915</a>              |
| Gene Name           | ACTN4                                  |
| Gene Alias          | ACTININ-4, DKFZp686K23158, FSGS, FSGS1 |
| Gene Description    | actinin, alpha 4                       |
| Omim ID             | <a href="#">603278 604638</a>          |
| Gene Ontology       | <a href="#">Hyperlink</a>              |

**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](#)