

ACTN4 monoclonal antibody (M06), clone 8G12

Catalog # H00000081-M06

Size 100 ug

Applications



Western Blot detection against Immunogen (131.3 KDa) .

Specification

Product Description

Mouse monoclonal antibody raised against a full-length recombinant ACTN4.

Immunogen

ACTN4 (NP_004915.2, 1 a.a. ~ 911 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Sequence

MVDYHAANQSYQYGPSSAGNGAGGGGSMGDYMAQEDDWRDLLLLDPAWEKQQRKTFTAWCN
SHLRKAGTQIENIDEDFRDGLKMLLLEVISGERLPKPERGKMRVHKINNPNKALDFIASKGVKLVS
GAEIVDGNAMTLGMIWTILRFAIQDISVEETSAKEGLLLWCQRKTAPYKNVNVQNFHISWKDGL
AFNALIHRHPELIEYDKLRKDDPVTNLNNAFEVAEKYLDIPKMLDAEDIVNTARPDEKAIMTYVSSF
YHAFSGAQKAETAANRICKVLAVNQENEHLMEDYEKLASDLLEWIRRTIPWLEDVRPQKTIQEMQ
QKLEDFRDYRRVHKPPKVQEKQLEINFNTLQTKLRLSNRPAFMPSEGKMSVDINNGWQHLEQA
EKGYYEALLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMKHRDYETATLSDIKALIRKHEAF
ESDLAAHQDRVEQIAAIAQELNELDYDSHNVNTRCQKICDQWDALGSLTHSRREALEKTEKQLE
AIDQLHLEYAKRAAPFNNWMESAMEDLQDMFVHTIEEIEGLISAHDQFKSTLPDADREREAILAIHK
EAQRIAESNHILSGSNPYTTVTPQIINSKWEKVQQLVPRDHALLEEQSKQQSNEHLRRQFASQA
NVVGPWIQTKMEEIGRISIEMNGTLEDQLSHLKQYERSVDYKPNLDLLEQQHQLIQEALIFDNKHTN
YTMEHIRVGWEQLLTTIARTINEVENQILTRDAKGISQEQMQEFRAFNFHFDKDHGGALGPPEEFA
CLISLGYDVENDRQGEAEFNRIMSLVDPNHSGLVTFQAFIDFMSRETTDTDTADQVIASFKVLAGD
KNFITAEELRRELPPDQAEYCIARMAPYQGPDAVPGALDYKSFSTALYGESDL

Host

Mouse

Reactivity

Human

Interspecies Antigen Sequence

Mouse (98); Rat (98)

Isotype

IgG1 Kappa

Quality Control TestingAntibody Reactive Against Recombinant Protein.
Western Blot detection against Immunogen (131.3 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](#)

- ELISA

Gene Info — ACTN4

Entrez GeneID[81](#)**GeneBank Accession#**[NM_004924.3](#)**Protein Accession#**[NP_004915.2](#)**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

Publication Reference

- [Actinin-4 Expression Predicts Poor Disease-free Survival and Correlates with Delayed Lymph Node Metastasis in Patients with Completely Resected Oral Squamous Cell Carcinoma.](#)

Yusuke Matsuzaki, Yukio Watabe, Kazuaki Enatsu, Shiro Shigematsu, Takahiko Shibahara.

The Bulletin of Tokyo Dental College 2020 Sep; 61(3):179.

Application: IHC-P, Human, Human oral squamous cell carcinoma

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](#)