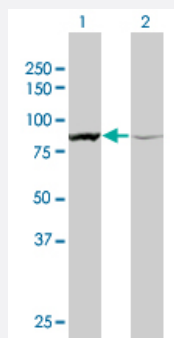


ACTN1 monoclonal antibody (M01), clone 3F1

Catalog # H00000087-M01

Size 100 ug

Applications

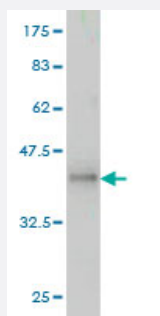


Western Blot (Transfected lysate)

Western Blot analysis of ACTN1 expression in transfected 293T cell line by ACTN1 monoclonal antibody (M01), clone 3F1.

Lane 1: ACTN1 transfected lysate(103.1 KDa).

Lane 2: Non-transfected lysate.



Western Blot detection against Immunogen (36.41 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant ACTN1.
Immunogen	ACTN1 (NP_001093, 543 a.a. ~ 639 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	<p> EIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVNMAGTNPYTTITPQEINGKWDHVRQL VPRRDQALTEEHARQQHNERLRKQFGAQA </p>
Host	Mouse
Reactivity	Human

Interspecies Antigen Sequence	Mouse (100); Rat (99)
Isotype	IgG3 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.41 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 (Transfected lysate)

Western Blot analysis of ACTN1 expression in transfected 293T cell line by ACTN1 monoclonal antibody (M01), clone 3F1.

Lane 1: ACTN1 transfected lysate(103.1 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- ELISA

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

Publication Reference

- [Rab13 Small G Protein and Junctional Rab13-binding Protein \(JRAB\) Orchestrate Actin Cytoskeletal Organization during Epithelial Junctional Development.](#)

Sakane A, Abdallah AA, Nakano K, Honda K, Ikeda W, Nishikawa Y, Matsumoto M, Matsushita N, Kitamura T, Sasaki T. The Journal of Biological Chemistry 2012 Oct; 287(51):42455.

Application: WB-Ce, Human, HEK293, MTD-1A cell

- [alpha-actinin 1 and alpha-actinin 4: Contrasting roles in the survival, motility, and rhoA signaling of astrocytoma cells.](#)

Quick Q, Skalli O.

Experimental Cell Research 2010 Apr; 316(7):1137.

Application: IF, WB, Human, Human brain tissues, A172, Hs683, U-87, U-118, U-373 cells

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](#)