

ACTN1 Antibody (monoclonal) (M01)**Mouse monoclonal antibody raised against a partial recombinant ACTN1.****Catalog # AT1032a****Specification**

ACTN1 Antibody (monoclonal) (M01) - Product Information

Application	WB
Primary Accession	P12814
Other Accession	NM_001102
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG3 Kappa
Calculated MW	103058

ACTN1 Antibody (monoclonal) (M01) - Additional Information**Gene ID 87****Other Names**

Alpha-actinin-1, Alpha-actinin cytoskeletal isoform, F-actin cross-linking protein, Non-muscle alpha-actinin-1, ACTN1

Target/Specificity

ACTN1 (NP_001093, 543 a.a. ~ 639 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

ACTN1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

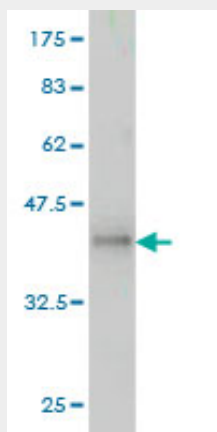
ACTN1 Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.

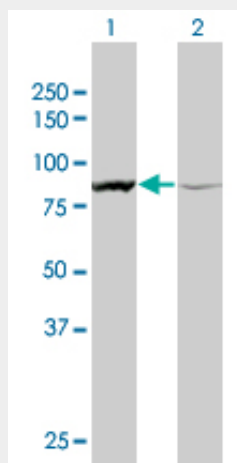
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ACTN1 Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.41 kDa) .



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.

ACTN1 Antibody (monoclonal) (M01) - Background

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.

ACTN1 Antibody (monoclonal) (M01) - References

1.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.J Biol Chem. 2012 Dec 14;287(51):42455-68. doi: 10.1074/jbc.M112.383653. Epub 2012 Oct 24.2.alpha-actinin 1 and alpha-actinin 4: Contrasting roles in the survival, motility, and rhoa signaling of astrocytoma cells.Quick Q, Skalli O.Exp Cell Res. 2010 Feb 12. [Epub ahead of print]