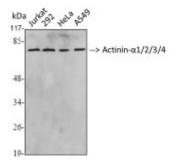


## Anti-Actinin-alpha /2/3/4 antibody





**Description** Rabbit polyclonal to Actinin-alpha1/2/3/4.

Model STJ91466

**Host** Rabbit

**Reactivity** Human, Mouse, Rat

**Applications** ELISA, IHC, WB

Immunogen Synthesized peptide derived from human Actinin-alpha1/2/3/4

**Immunogen Region** 40-120 aa, N-terminal

**Gene ID** <u>87</u>

Gene Symbol ACTN1

**Dilution range** WB 1:500-1:2000IHC 1:100-1:300ELISA 1:20000

**Specificity** Actinin-alpha1/2/3/4 Polyclonal Antibody detects endogenous levels of

Actinin-alpha1/2/3/4 protein.

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

Protein Name Alpha-actinin-1 Alpha-actinin cytoskeletal isoform F-actin cross-linking

protein Non-muscle alpha-actinin-1

Molecular Weight 75 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:1630MIM:102575</u>

Alternative Names Alpha-actinin-1 Alpha-actinin cytoskeletal isoform F-actin cross-linking

protein Non-muscle alpha-actinin-1

**Function** F-actin cross-linking protein which is thought to anchor actin to a variety of

intracellular structures. This is a bundling protein.

Cellular Localization Cytoplasm, cytoskeleton Cytoplasm, myofibril, sarcomere, Z line Cell

membrane Cell junction Cell projection, ruffle. Colocalizes with MYOZ2 and PPP3CA at the Z-line of heart and skeletal muscle. Colocalizes with PSD in

membrane ruffles and central reticular structures.

**Post-translational** During microbial infection by V.cholerae monomeric actin is cross-linked by **Modifications** the toxins RtxA and VgrG1. Bacterial toxins mediate the cross-link between

the toxins RtxA and VgrG1. Bacterial toxins mediate the cross-link between Lys-50 of one monomer and Glu-270 of another actin monomer, which results in formation of highly toxic actin oligomers that cause cell rounding. The toxin can be highly efficient at very low concentrations by acting on formin homology family proteins. Toxic actin oligomers will bind with high affinity to formins and adversely affect both nucleation and elongation abilities of formins, thus causing their potent inhibition in both profilin-dependent and

independent manners.

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