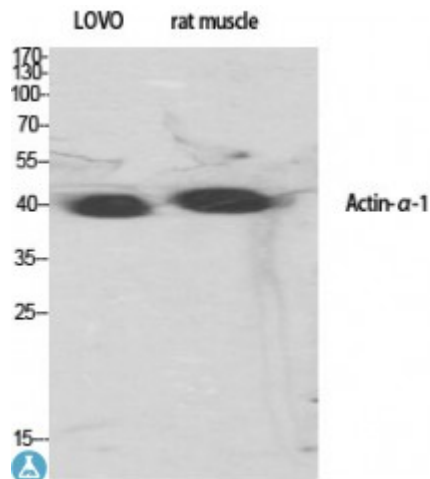


## Anti-Actin alpha antibody



### Description

Rabbit polyclonal to Actin alpha1.

<b>Model</b>	STJ91462
<b>Host</b>	Rabbit
<b>Reactivity</b>	Human, Mouse, Rat
<b>Applications</b>	ELISA, IHC, WB
<b>Immunogen</b>	Synthesized peptide derived from human Actin alpha1
<b>Immunogen Region</b>	1-80 aa, N-terminal
<b>Gene ID</b>	<a href="#">58</a>
<b>Gene Symbol</b>	<a href="#">ACTA1</a>
<b>Dilution range</b>	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:20000
<b>Specificity</b>	Actin alpha1 Polyclonal Antibody detects endogenous levels of Actin alpha1 protein.
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Note</b>	For Research Use Only (RUO).
<b>Protein Name</b>	Actin, alpha skeletal muscle Alpha-actin-1
<b>Molecular Weight</b>	45 kDa
<b>Clonality</b>	Polyclonal
<b>Conjugation</b>	Unconjugated

<b>Isotype</b>	IgG
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Concentration</b>	1 mg/ml
<b>Storage Instruction</b>	Store at -20°C, and avoid repeat freeze-thaw cycles.
<b>Database Links</b>	<a href="#">HGNC:129OMIM:102610</a>
<b>Alternative Names</b>	Actin, alpha skeletal muscle Alpha-actin-1
<b>Function</b>	Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
<b>Cellular Localization</b>	Cytoplasm, cytoskeleton.
<b>Post-translational Modifications</b>	Oxidation of Met-46 and Met-49 by MICALs (MICAL1, MICAL2 or MICAL3) to form methionine sulfoxide promotes actin filament depolymerization. MICAL1 and MICAL2 produce the (R)-S-oxide form. The (R)-S-oxide form is reverted by MSRB1 and MSRB2, which promote actin repolymerization . Monomethylation at Lys-86 (K84me1) regulates actin-myosin interaction and actomyosin-dependent processes. Demethylation by ALKBH4 is required for maintaining actomyosin dynamics supporting normal cleavage furrow ingression during cytokinesis and cell migration. (Microbial infection) Monomeric actin is cross-linked by V.cholerae toxins RtxA and VgrG1 in case of infection: bacterial toxins mediate the cross-link between Lys-52 of one monomer and Glu-272 of another actin monomer, resulting 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 bind with high affinity to formins and adversely affect both nucleation and elongation abilities of formins, causing their potent inhibition in both profilin-dependent and independent manners .