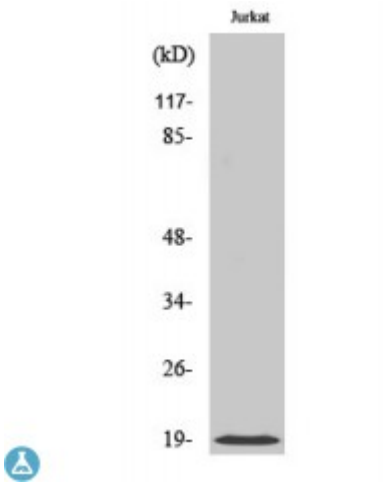
Anti-Cofilin antibody



Description	Cofilin is a protein encoded by the JAK1 gene which is approximately 133,2 kDa. Cofilin is localised to the endomembrane system and is involved in RET signalling, common cytokine receptor gamma-chain family signalling pathways, Th17 cell differentiation and IL27-mediated signalling events. It phosphorylates STAT proteins and plays a key role in interferon-alpha/beta and interferon-gamma signal transduction. Cofilin is expressed at higher levels in primary colon tumor than normal colon tissue. Mutations in the JAK1 gene may result in mixed lacrimal gland cancer, t-cell prolymphocytic leukemia and chilblain lupus. The antibody STJ92371 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of Cofilin protein.

Model	STJ92371
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human Cofilin around the non-phosphorylation site of S3.
Immunogen Region	10-90 aa
Gene ID	1072
Gene Symbol	CFL1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000
Specificity	Cofilin Polyclonal Antibody detects endogenous levels of Cofilin protein.

Tissue Specificity	Widely distributed in various tissues.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Cofilin-1 18 kDa phosphoprotein p18 Cofilin, non-muscle isoform
Molecular Weight	19 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	HGNC:1874OMIM:601442
Alternative Names	Cofilin-1 18 kDa phosphoprotein p18 Cofilin, non-muscle isoform
Function	Binds to F-actin and exhibits pH-sensitive F-actin depolymerizing activity. Regulates actin cytoskeleton dynamics. Important for normal progress through mitosis and normal cytokinesis. Plays a role in the regulation of cell morphology and cytoskeletal organization. Required for the up-regulation of atypical chemokine receptor ACKR2 from endosomal compartment to cell membrane, increasing its efficiency in chemokine uptake and degradation . Required for neural tube morphogenesis and neural crest cell migration .
Cellular Localization	Nucleus matrix Cytoplasm, cytoskeleton Cell projection, ruffle membrane Cell projection, lamellipodium membrane. Colocalizes with the actin cytoskeleton in membrane ruffles and lamellipodia. Detected at the cleavage furrow and contractile ring during cytokinesis. Almost completely in nucleus in cells exposed to heat shock or 10% dimethyl sulfoxide.
Post-translational Modifications	Inactivated by phosphorylation on Ser-3. Phosphorylated on Ser-3 in resting cells . Dephosphorylated by PDXP/chronophin; this restores its activity in promoting actin filament depolymerization. The phosphorylation of Ser-24 may prevent recognition of the nuclear localization signal . Phosphorylated via a ARRB1-RAC1-LIMK1-PAK1 cascade upon active ligand stimulation of atypical chemokine receptor ACKR2.