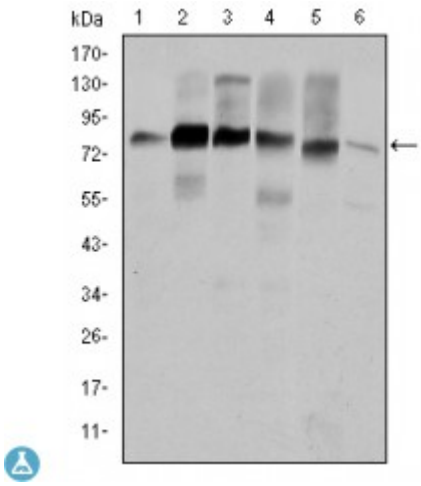
Anti-Cortactin antibody



Description	Mouse monoclonal to Cortactin.

Model	STJ97963
Host	Mouse
Reactivity	Human, Mouse
Applications	ELISA, IHC, WB
Immunogen	Purified recombinant fragment of human Cortactin expressed in E. Coli.
Gene ID	2017
Gene Symbol	CTTN
Dilution range	WB 1:500-1:2000IHC 1:200-1:1000ELISA 1:10000
Specificity	Cortactin Monoclonal Antibody detects endogenous levels of Cortactin protein.
Purification	Affinity purification
Clone ID	4C6
Note	For Research Use Only (RUO).
Protein Name	Src substrate cortactin Amplaxin Oncogene EMS1
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Ascitic fluid containing 0.03% sodium azide.

Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:3338OMIM:164765
Alternative Names	Src substrate cortactin Amplaxin Oncogene EMS1
Function	Contributes to the organization of the actin cytoskeleton and cell shape . Plays a role in the formation of lamellipodia and in cell migration. Plays a role in the regulation of neuron morphology, axon growth and formation of neuronal growth cones . Through its interaction with CTTNBP2, involved in the regulation of neuronal spine density . Plays a role in the invasiveness of cancer cells, and the formation of metastases . Plays a role in focal adhesion assembly and turnover . In complex with ABL1 and MYLK regulates cortical actin-based cytoskeletal rearrangement critical to sphingosine 1-phosphate (S1P)-mediated endothelial cell (EC) barrier enhancement . Plays a role in intracellular protein transport and endocytosis, and in modulating the levels of potassium channels present at the cell membrane . Plays a role in receptor-mediated endocytosis via clathrin-coated pits . Required for stabilization of KCNH1 channels at the cell membrane .
Sequence and Domain Family	The SH3 motif may mediate binding to the cytoskeleton.
Cellular Localization	Cytoplasm, cytoskeleton Cell projection, lamellipodium Cell projection, ruffle. Cell projection, dendrite Cell projection Cell membrane Cell projection, podosome Cell junction Cell junction, focal adhesion Membrane, clathrin-coated pit Cell projection, dendritic spine Cytoplasm, cell cortex. Colocalizes transiently with PTK2/FAK1 at focal adhesions . Associated with membrane ruffles and lamellipodia. In the presence of CTTNBP2NL, colocalizes with stress fibers . In the presence of CTTNBP2, localizes at the cell cortex . In response to neuronal activation by glutamate, redistributes from dendritic spines to the dendritic shaft . Colocalizes with DNM2 at the basis of filopodia in hippocampus neuron growth zones .
Post-translational Modifications	Phosphorylated by PKN2 at both serine and threonine residues in a GTP-bound Rac1-dependent manner in hyaluronan-induced astrocytes and hence down-regulated CTTN ability to associates with filamentous actin . Phosphorylated on tyrosine residues in response to CHRM1 activation . Phosphorylated by PTK2/FAK1 in response to cell adhesion . Phosphorylated by FER. Tyrosine phosphorylation in transformed cells may contribute to cellular growth regulation and transformation. Phosphorylated in response to FGR activation. Phosphorylation by SRC promotes MYLK binding.