

Anti-Cortactin antibody



Description Rabbit polyclonal to Cortactin.

Model STJ92429

Host Rabbit

Reactivity Human, Mouse, Rat, Simian

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human Cortactin around the non-

phosphorylation site of Y466.

Immunogen Region 410-490 aa

Gene ID <u>2017</u>

Gene Symbol <u>CTTN</u>

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000

Specificity Cortactin Polyclonal Antibody detects endogenous levels of Cortactin 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 Src substrate cortactin Amplaxin Oncogene EMS1

Molecular Weight 85/68/80 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:3338OMIM:164765</u>

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 Phosphorylated by PKN2 at both serine and threonine residues in a GTP-**Modifications** 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.