

Cortactin (phospho Tyr421) Polyclonal Antibody

Catalog # AP67004

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q14247
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61586

Additional Information

Gene ID	2017
Other Names	CTTN; EMS1; Src substrate cortactin; Amplaxin; Oncogene EMS1
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	CTTN
Synonyms	EMS1
Function	Contributes to the organization of the actin cytoskeleton and cell shape (PubMed: 21296879). 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 (By similarity). Through its interaction with CTTNBP2, involved in the regulation of neuronal spine density (By similarity). Plays a role in focal adhesion assembly and turnover (By similarity). In complex with ABL1 and MYLK regulates cortical actin-based cytoskeletal rearrangement critical to sphingosine 1-phosphate (S1P)-mediated endothelial cell (EC) barrier enhancement (PubMed: 20861316). Plays a role in intracellular protein transport and endocytosis, and in modulating the levels of potassium channels present at the cell membrane (PubMed: 17959782). Plays a role in receptor-mediated endocytosis via clathrin-coated pits (By similarity). Required for stabilization of KCNH1 channels at the cell membrane (PubMed: 23144454). Plays a role in the invasiveness of cancer cells, and the formation of metastases

(PubMed:[16636290](#)).

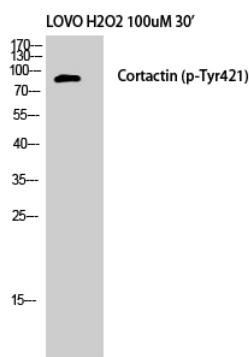
Cellular Location

Cytoplasm, cytoskeleton. Cell projection, lamellipodium. Cell projection, ruffle. Cell projection, dendrite. Cell projection {ECO:0000250 | UniProtKB:Q66HL2}. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, podosome {ECO:0000250 | UniProtKB:Q01406}. Cell junction {ECO:0000250 | UniProtKB:Q66HL2}. Cell junction, focal adhesion {ECO:0000250 | UniProtKB:Q66HL2}. Membrane, clathrin-coated pit {ECO:0000250 | UniProtKB:Q66HL2}. Cell projection, dendritic spine. Cytoplasm, cell cortex Endoplasmic reticulum {ECO:0000250 | UniProtKB:Q01406}. Note=Colocalizes transiently with PTK2/FAK1 at focal adhesions (By similarity) Associated with membrane ruffles and lamellipodia. In the presence of CTTNBP2NL, colocalizes with stress fibers (By similarity). In the presence of CTTNBP2, localizes at the cell cortex (By similarity). In response to neuronal activation by glutamate, redistributes from dendritic spines to the dendritic shaft (By similarity). Colocalizes with DNM2 at the basis of filopodia in hippocampus neuron growth zones (By similarity). {ECO:0000250 | UniProtKB:Q60598, ECO:0000250 | UniProtKB:Q66HL2}

Background

Contributes to the organization of the actin cytoskeleton and cell shape (PubMed: [21296879](#)). 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 (By similarity). Through its interaction with CTTNBP2, involved in the regulation of neuronal spine density (By similarity). Plays a role in the invasiveness of cancer cells, and the formation of metastases (PubMed:[16636290](#)). Plays a role in focal adhesion assembly and turnover (By similarity). In complex with ABL1 and MYLK regulates cortical actin-based cytoskeletal rearrangement critical to sphingosine 1-phosphate (S1P)-mediated endothelial cell (EC) barrier enhancement (PubMed:[20861316](#)). Plays a role in intracellular protein transport and endocytosis, and in modulating the levels of potassium channels present at the cell membrane (PubMed:[17959782](#)). Plays a role in receptor-mediated endocytosis via clathrin-coated pits (By similarity). Required for stabilization of KCNH1 channels at the cell membrane (PubMed:[23144454](#)).

Images



Western Blot analysis of LOVO+H2O2 cells using Phospho-Cortactin (Y421) Polyclonal Antibody

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.