

Anti-Cortactin CTTN Rabbit Monoclonal Antibody

Catalog # ABO13981

Product Information

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	Q14247
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Cortactin CTTN Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	2017
Other Names	Src substrate cortactin, Amplaxin, Oncogene EMS1, CTTN, EMS1
Calculated MW	61586
Application Details	WB 1:5000-1:10000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:20 FC 1:20
Subcellular Localization	Cytoplasm, cytoskeleton. Cell projection, lamellipodium. Cell projection, ruffle. Cell projection, dendrite. Cell projection. Cell membrane ; Peripheral membrane protein ; Cytoplasmic side. 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 (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)..
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: FAI-3

Immunogen	A synthesized peptide derived from human Cortactin
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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}

Images

Immunohistochemical analysis of paraffin-embedded human breast cancer, using Cortactin Antibody.

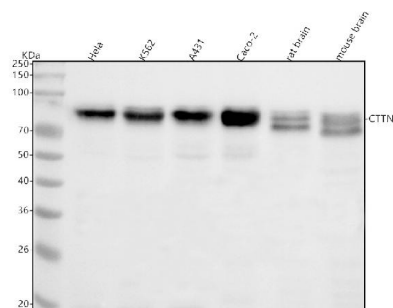
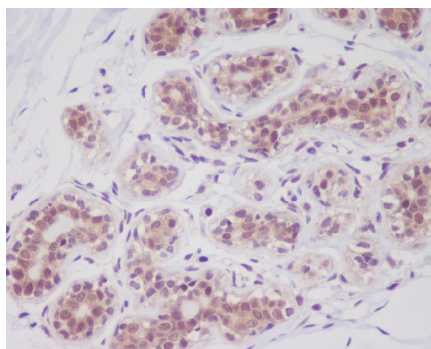


Figure 1. Western blot analysis of Cortactin using anti-Cortactin antibody (M01253).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human K562 whole cell lysates,

Lane 3: human A431 whole cell lysates,

Lane 4: human Caco-2 whole cell lysates,

Lane 5: rat brain tissue lysates,

Lane 6: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Cortactin antigen affinity purified monoclonal antibody (Catalog # M01253) at 1:5000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Cortactin at approximately 85 kDa. The expected band size for Cortactin is at 62 kDa.

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