

CTTN Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP13727c

Specification

CTTN Antibody (Center) Blocking peptide - Product Information

Primary Accession

<u>014247</u>

CTTN Antibody (Center) Blocking peptide - Additional Information

Gene ID 2017

Other Names

Src substrate cortactin, Amplaxin, Oncogene EMS1, CTTN, EMS1

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13727c was selected from the Center region of CTTN. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CTTN Antibody (Center) Blocking peptide - 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:<a



href="http://www.uniprot.org/citations/17959782" target="_blank">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}

CTTN Antibody (Center) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides

CTTN Antibody (Center) Blocking peptide - Images

CTTN Antibody (Center) Blocking peptide - Background

This gene is overexpressed in breast cancer and squamouscell carcinomas of the head and neck. The encoded protein islocalized in the cytoplasm and in areas of the cell-substratumcontacts. This gene has two roles: (1) regulating the interactions between components of adherens-type junctions and (2) organizing the cytoskeleton and cell adhesion structures of epithelia and carcinoma cells. During apoptosis, the encoded protein is degraded in a caspase-dependent manner. The aberrant regulation of this genecontributes to tumor cell invasion and metastasis. Three splicevariants that encode different isoforms have been identified forthis gene.

CTTN Antibody (Center) Blocking peptide - References

Croucher, D.R., et al. Mol. Cell. Biol. 30(21):5057-5070(2010)Eiseler, T., et al. J. Biol. Chem. 285(24):18672-18683(2010)Xu, X.Z., et al. Mod. Pathol. 23(2):187-196(2010)Saitoh, Y., et al. Int. J. Oncol. 35(6):1277-1288(2009)Hirakawa, H., et al. Int. J. Oncol. 35(6):1271-1276(2009)