

**Goat Anti-Cortactin / EMS1 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1269a

**Specification**

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**Goat Anti-Cortactin / EMS1 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q14247</a>
Other Accession	<a href="#">NP_612632</a> , <a href="#">2017</a> , <a href="#">13043 (mouse)</a>
Reactivity	Mouse
Predicted	Human, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	61586

**Goat Anti-Cortactin / EMS1 Antibody - Additional Information**

**Gene ID** 2017

**Other Names**

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

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-Cortactin / EMS1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-Cortactin / EMS1 Antibody - Protein Information**

**Name** CTTN

**Synonyms** EMS1

**Function**

Contributes to the organization of the actin cytoskeleton and cell shape (PubMed:<a href="http://www.uniprot.org/citations/21296879" target="\_blank">21296879</a>). 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:<a href="http://www.uniprot.org/citations/20861316" target="\_blank">20861316</a>). 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</a>). Plays a role in receptor-mediated endocytosis via clathrin-coated pits (By similarity). Required for stabilization of KCNH1 channels at the cell membrane (PubMed:<a href="http://www.uniprot.org/citations/23144454" target="\_blank">23144454</a>). Plays a role in the invasiveness of cancer cells, and the formation of metastases (PubMed:<a href="http://www.uniprot.org/citations/16636290" target="\_blank">16636290</a>).

### Cellular Location

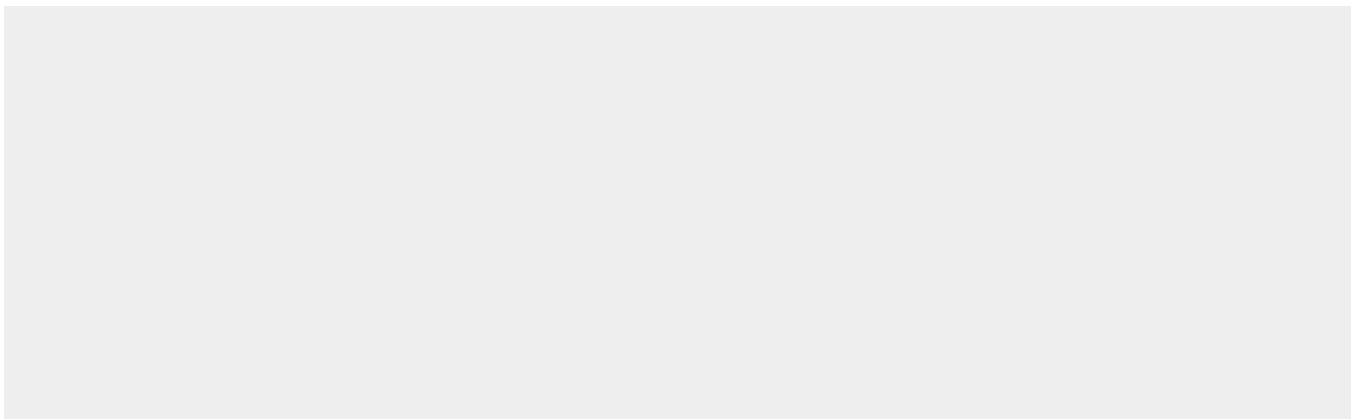
Cytoplasm, cytoskeleton. Cell projection, lamellipodium. Cell projection, ruffle. Cell projection, dendrite. Cell projection {ECO:0000250|UniProtKB:Q66HL2}. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, podosome {ECO:0000250|UniProtKB:Q01406}. Cell junction {ECO:0000250|UniProtKB:Q66HL2}. 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}

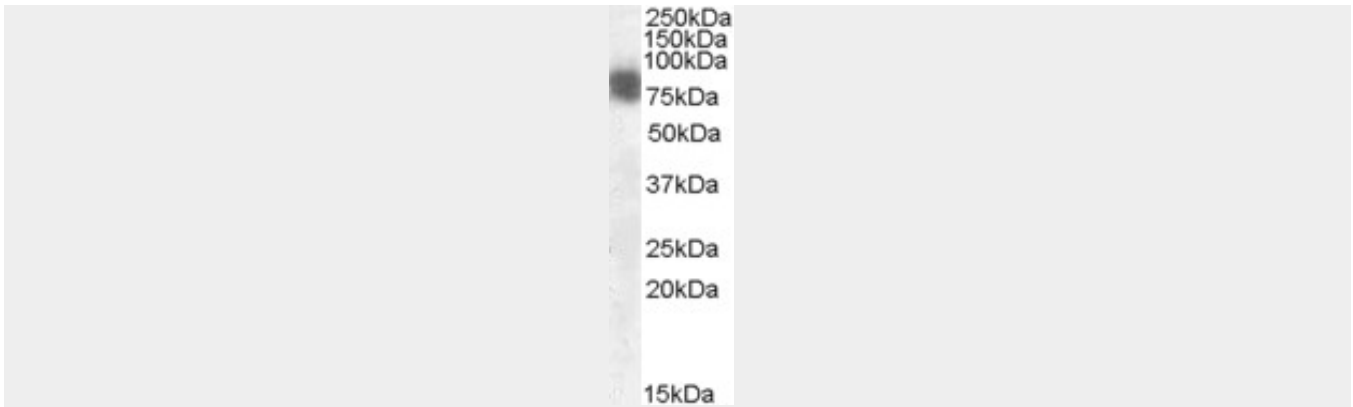
### Goat Anti-Cortactin / EMS1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Goat Anti-Cortactin / EMS1 Antibody - Images





AF1269a (0.01 µg/ml) staining of Mouse Brain lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### **Goat Anti-Cortactin / EMS1 Antibody - Background**

This gene is overexpressed in breast cancer and squamous cell carcinomas of the head and neck. The encoded protein is localized in the cytoplasm and in areas of the cell-substratum contacts. 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 gene contributes to tumor cell invasion and metastasis. Three splice variants that encode different isoforms have been identified for this gene.

### **Goat Anti-Cortactin / EMS1 Antibody - References**

Protein kinase D controls actin polymerization and cell motility through phosphorylation of cortactin. Eiseler T, et al. J Biol Chem, 2010 Jun 11. PMID 20363754.

Cytoskeleton alterations in melanoma: aberrant expression of cortactin, an actin-binding adapter protein, correlates with melanocytic tumor progression. Xu XZ, et al. Mod Pathol, 2010 Feb. PMID 19898426.

alpha-tocopheryl phosphate suppresses tumor invasion concurrently with dynamic morphological changes and delocalization of cortactin from invadopodia. Saitoh Y, et al. Int J Oncol, 2009 Dec. PMID 19885550.

Localization of cortactin is associated with colorectal cancer development. Hirakawa H, et al. Int J Oncol, 2009 Dec. PMID 19885549.

Calreticulin promotes cell motility and enhances resistance to anoikis through STAT3-CTTN-Akt pathway in esophageal squamous cell carcinoma. Du XL, et al. Oncogene, 2009 Oct 22. PMID 19684620.