

## Cortactin (phospho Tyr421) Polyclonal Antibody

Catalog No: YP0072

Reactivity: Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Cortactin

**Fields:** >>Tight junction;>>Bacterial invasion of epithelial cells;>>Pathogenic

Escherichia coli infection;>>Shigellosis;>>Proteoglycans in cancer

Gene Name: CTTN

**Protein Name:** Src substrate cortactin

Q14247

Q60598

Human Gene Id: 2017

**Human Swiss Prot** 

No:

Mouse Gene Id: 13043

**Mouse Swiss Prot** 

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

Cortactin around the phosphorylation site of Tyr421. AA range:388-437

Specificity: Phospho-Cortactin (Y421) Polyclonal Antibody detects endogenous levels of

Cortactin protein only when phosphorylated at Y421.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

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**Concentration**: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 80kD

**Cell Pathway:** Tight junction; Pathogenic Escherichia coli infection;

**Background:** cortactin(CTTN) Homo sapiens 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 adherenstype 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. [provided by RefSeq, May 2010],

**Function:** function: May contribute to the organization of cell structure. The SH3 motif may

function as a binding region to cytoskeleton. Tyrosine phosphorylation in

transformed cells may contribute to cellular growth regulation and transformation.,online information:Cortactin entry,similarity:Contains 1 SH3 domain.,similarity:Contains 7 cortactin repeats.,subcellular location:Associated with membrane ruffles and lamellipodia.,subunit:Interacts with SHANK2 and

SHANK3 via its SH2 domain. Also interacts with FGD1 (By similarity). Interacts

with PLXDC2.,

Subcellular Cytoplasm, cytoskeleton . Cell projection, lamellipodium . Cell projection, ruffle.

Location : Cell projection . Cell membrane ; Peripheral membrane

Cell projection, dendrite. Cell projection. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, podosome. Cell junction. Cell

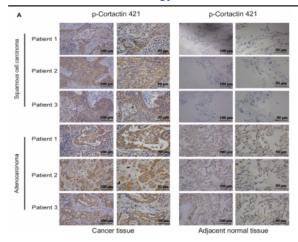
junction, focal adhesion . Membrane, clathrin-coated pit . Cell projection, dendritic spine . Cytoplasm, cell cortex . Colocalizes transiently with PTK2/FAK1 at focal adhesions (By similarity). Associated with membrane ruffles and lamellipodia. In the presence of CTTNBP2NL, colocalizes with stress fibers (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

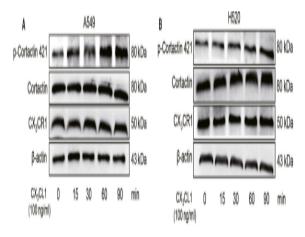
dendritic shaft (By similarity). Colocalizes with DNM2 at the basis

**Expression :** Coronary artery, Epithelium, Mammary gland, Placenta, Platelet, Testis,

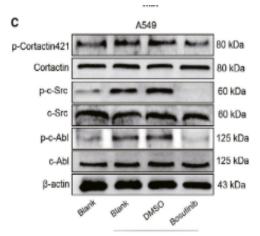
## **Products Images**



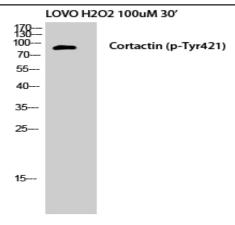
Fan, Mengtian, et al. "CX3CL1 promotes tumour cell by inducing tyrosine phosphorylation of cortactin in lung cancer." Journal of Cellular and Molecular Medicine 25.1 (2021): 132-146.



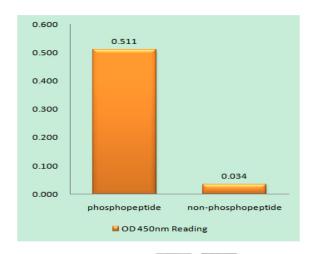
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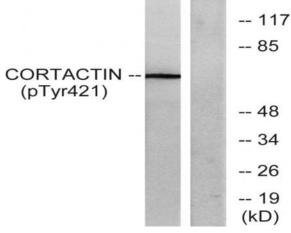
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Western Blot analysis of LOVO+H2O2 cells using Phospho-Cortactin (Y421) Polyclonal Antibody

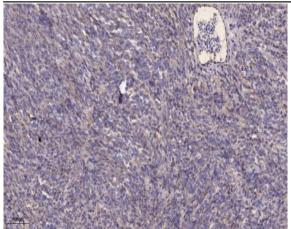


Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Cortactin (Phospho-Tyr421) Antibody



Western blot analysis of lysates from HeLa cells treated with H2O2, using Cortactin (Phospho-Tyr421) Antibody. The lane on the right is blocked with the phospho peptide.





Immunohistochemical analysis of paraffin-embedded human Colon cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).