

Cortactin Antibody

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For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IHC-P Endogenous	H, M, R, Mk	80, 85 kDa	Rabbit**

Background: Cortactin is a cortical actin binding protein. Its amino-terminal acidic domain (NTA) associates with the Arp2/3 and WASP complex at F-actin branches. The central region of the protein contains six repeats of 37 amino acids that are important in F-actin binding and cross-linking. The carboxy terminus contains a proline-rich region and an SH3 domain that can interact with numerous scaffolding proteins, such as CortBP1 and Shank3 (1,2). Cortactin is involved in signaling events that coordinate actin reorganization during cell movement. The human cortactin homologue EMS1 is overexpressed in numerous cancers with poor patient prognosis (3). Cortactin may also play an important role in the organization of transmembrane receptors at postsynaptic densities (PSD) and tight junctions by linking scaffolding proteins to the actin network (4).

Specificity/Sensitivity: Cortactin Antibody detects endogenous levels of total cortactin protein.

Source/Purification: Polyclonal antibodies are produced by immunizing rabbits with a synthetic peptide (KLH-coupled) corresponding to the carboxy terminal residues of human cortactin. Antibodies are purified by protein A and peptide affinity chromatography.

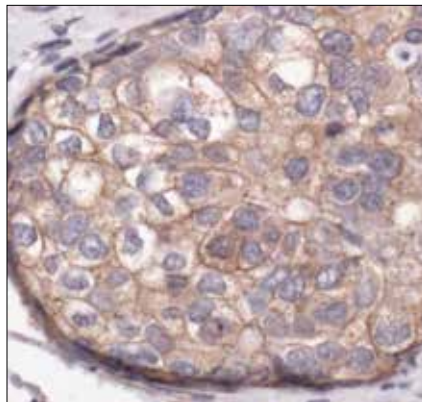
Selected Application References:

Lua, B.L. and Low, B.C. (2004) BPGAP1 interacts with cortactin and facilitates its translocation to cell periphery for enhanced cell migration. *Mol. Biol. Cell* 15, 2873–2883. Application: W.

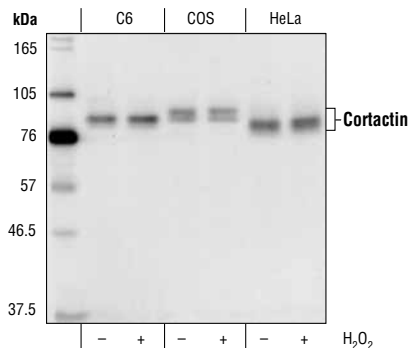
Kai, M. et al. (2004) The novel dominant mutation Dspd leads to a severe spermiogenesis defect in mice. *Biol. Reprod.* 70, 1213–1221. Application: IHC-P.

Background References:

- Du, Y. et al. (1998) *Mol. Cell. Biol.* 18, 5838–5851.
- Naisbitt, S. et al. (1999) *Neuron* 23, 569–582.
- Rodrigo, J.P. et al. (2000) *Clin. Cancer Res.* 6, 3177–3182.
- Weed, S.A. and Parsons, J.T. (2001) *Oncogene* 20, 6418–6434.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma, showing cytoplasmic and membrane localization using Cortactin Antibody.



Western blot analysis of extracts from C6, COS and HeLa cells, untreated or hydrogen peroxide (H₂O₂)-treated using Cortactin Antibody.

Entrez-Gene ID #2017
Swiss-Prot Acc. #Q14247

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western Blotting	1:1000
Immunohistochemistry (Paraffin)	1:50
Unmasking buffer:	Citrate
Antibody diluent:	TBST-5%NGS

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For Western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA—Peptide

Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine

Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.