Cortactin Antibody

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 ContBP1 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:

Background References:

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

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.