Human/Rat Cortactin Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF6096

DESCRIPTION

Species Reactivity	Human/Rat
Specificity	Detects human and rat Cortactin in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human Cortactin Met1-Gly85 Accession # Q14247
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

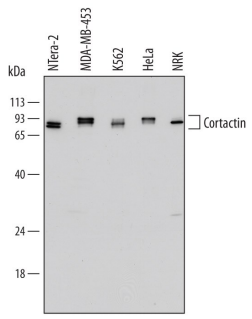
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Knockout Validated	Cortactin is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in Cortactin knockout HeLa cell line.	

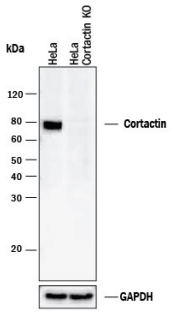
DATA

Western Blot



Detection of Human and Rat Cortactin by Western Blot. Western blot shows lysates of NTera-2 human testicular embryonic carcinoma cell line, MDA-MB-453 human breast cancer cell line, K562 human chronic myelogenous leukemia cell line, HeLa human cervical epithelial carcinoma cell line, and NRK rat normal kidney cell line. PVDF Membrane was probed with 1 µg/mL of Goat Anti-Human/Rat Cortactin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6096) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). Specific bands were detected for Cortactin at approximately 80-85 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Knockout Validated



Western Blot Shows Human Cortactin Specificity by Using Knockout Cell Line. Western blot shows lysates of HeLa human cervical epithelial carcinoma parental cell line and Cortactin knockout HeLa cell line (KO). PVDF membrane was probed with 1 µg/mL of Goat Anti-Human/Rat Cortactin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6096) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Cortactin at approximately 80 kDa (as indicated) in the parental HeLa cell line, but is not detectable in knockout HeLa cell line. GAPDH (Catalog # AF5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Cortactin (also EMS1 and Amplaxin) is an 80-85 kDa multidomain scaffold-associated protein. It is an actin-binding cytoplasmic protein found at intercellular junctions and near lamellipodia. It is also found in tumor invadopodia, a somewhat analogous structure to lamellipodia. Here, Cortactin appears to coordinate actin assembly with MMP secretion, thus facilitating tumor invasiveness. Human Cortactin is 550 amino acids (aa) in length and contains six-plus Cortactin regions (aa 80-324) that regulate actin polymerization, and one SH3 domain (aa 496-548) that binds to N-WASP. Cortactin is highly phosphorylated on Tyr and Ser/Thr, and undergoes acetylation.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449