**BACKGROUND**

Cortactin (also designated Ems-1) is a filamentous Actin (F-Actin) binding protein that has been shown to be a substrate for Src p60. Cortactin contains tandem 37 amino acid repeats at the amino-terminus and an SH3 domain at the carboxy-terminus. The tandem repeats appear to be necessary for F-Actin binding. Tyrosine phosphorylation of Cortactin by Src p60 results in diminished F-Actin binding to Cortactin and reduced F-Actin cross-linking activity. Cortactin has also been shown to be phosphorylated in response to FGF-1. Cortactin exhibits abundant expression in megakaryocytes and platelets, and it may play a role in the maturation of megakaryocytes.

**CHROMOSOMAL LOCATION**

Genetic locus: CTTN (human) mapping to 11q13.3; Cttn (mouse) mapping to 7 F5.

**SOURCE**

Cortactin (A-4) is a mouse monoclonal antibody raised against amino acids 309-499 of Cortactin of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Cortactin (A-4) is available conjugated to agarose (sc-55578 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-55578 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-55578 PE), fluorescein (sc-55578 FITC), Alexa Fluor® 488 (sc-55578 AF488), Alexa Fluor® 546 (sc-55578 AF546), Alexa Fluor® 594 (sc-55578 AF594) or Alexa Fluor® 647 (sc-55578 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-55578 AF680) or Alexa Fluor® 790 (sc-55578 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

Cortactin (A-4) is recommended for detection of Cortactin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:200-1:2000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of Cortactin: 80 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HeLa whole cell lysate: sc-2200 or Cortactin (m): 293T Lysate: sc-126659.

**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

Cortactin (A-4) sc-55578. Western blot analysis of Cortactin expression in non-transfected 293T: sc-117752 (A), mouse Cortactin transfected 293T: sc-126659 (B) and HeLa (C) whole cell lysates.

Cortactin (A-4): sc-55578. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing cytoplasmic staining of glandular cells.

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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