For Research Use Only

## Cortactin Recombinant antibody, PBS Only (Detector)

Catalog Number:84569-1-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

241987A12

**Basic Information** 

Catalog Number:

84569-1-PBS BC008799

ze: Genel D (NCBI):

100ug, Concentration: 1 mg/ml by 2017

Nanodrop; UNIPROT ID:

Source: Q14247

Rabbit Full Name:
Isotype: cortactin
IgG Calculated MW:

Immunogen Catalog Number: 57 kDa

AG1940 Observed MW:

70-85 kDa

GenBank Accession Number:

Applications

**Tested Applications:** 

WB, Cytometric bead array, Sandwich ELISA, Indirect

ELISA, Sample test

**Species Specificity:** 

human

**Product Information** 

84569-1-PBS targets Cortactin as part of a matched antibody pair:

MP01412-2: 84569-2-PBS capture and 84569-1-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

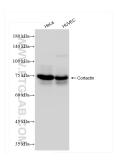
**Background Information** 

Cortactin, encoded by CTTN gene (formerly EMS1), was originally identified as a substrate of the Src kinase. It is a cytoskeletal protein that interacts with F-actin and Arp2/3 complex and plays an important role in regulation of actin assembly and cytoskeleton dynamics. Overexpression of cortactin increases cell migration, and is thought to contribute to the invasive phenotype of breast cancer and several other tumors. Three isoforms of cortactin exist due to the alternative splicing. Although cortactin has a predicted molecular weight around 65 kDa, it was detected as 80/85 doublet or as multiple bands between 75 and 85 kDa on SDS-PAGE (PMID: 18607838, 19089942).

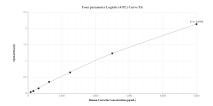
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

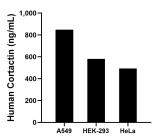
## **Selected Validation Data**



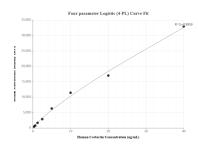
Various lysates were subjected to SDS PAGE followed by western blot with 84569-1-RR (Cortactin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84569-1-PBS in a different storage buffer formulation.



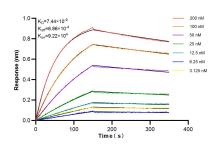
Sandwich ELISA standard curve of MP01412-2, Human Cortactin Recombinant Matched Antibody Pair - PBS only. 84569-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag1940. 84569-1-PBS was HRP conjugated as the detection antibody. Range: 78.1-5000 pg/mL



The mean Cortactin concentration was determined to be 848.3 ng/mL in A549 cell extract based on a 2.3 mg/mL extract load, 581.1 ng/mL in HEK-293 cell extract based on a 3.3 mg/mL extract load and 493.0 ng/mL in Hela cell extract based on a 1.0 mg/mL extract load.



Cytometric bead array standard curve of MP01412-2, Cortactin Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84569-2-PBS. Detection antibody: 84569-1-PBS. Standard: Ag1940. Range: 0.313-40 ng/mL



Biolayer interferometry (BLL) kinetic assays of 84569-1-RR against Human Cortactin were performed. The affinity constant is 7.44 nM.