

## Basic Information

<b>Product Name</b>	Anti-CDC42 Antibody
<b>Gene Name</b>	CDC42
<b>Source</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	human, mouse, rat
<b>Tested Application</b>	WB, IHC, FCM, ELISA
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
<b>Immunogen</b>	E.coli-derived human CDC42 recombinant protein (Position: K16-C188).
<b>Concentration</b>	500 ug/ml
<b>Purification</b>	Immunogen affinity purified.
<b>Observed MW</b>	21 kDa
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

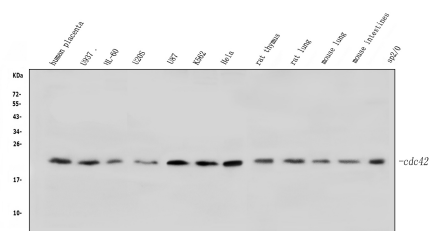
Cell division control protein 42 homolog also known as CDC42 is a protein involved in regulation of the cell cycle. In humans, CDC42 is encoded by the CDC42 gene.CDC42 is a small GTPase of the Rho-subfamily, which regulates signaling pathways that control diverse cellular functions including cell morphology, migration, endocytosis and cell cycle progression. This protein is highly similar to Saccharomyces cerevisiae Cdc 42, and is able to complement the yeast cdc42-1 mutant. The product of oncogene Dbl was reported to specifically catalyze the dissociation of GDP from this protein. This protein could regulate actin polymerization through its direct binding to Neural Wiskott-Aldrich syndrome protein (N-WASP), which subsequently activates Arp2/3 complex. Alternative splicing of this gene results in

multiple transcript variants.

## Reference

Anti-CDC42 Antibody 被引用在1文献中。

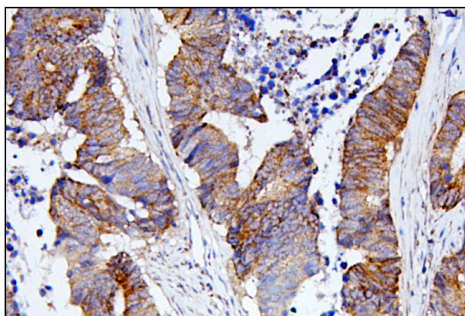
## Selected Validation Data



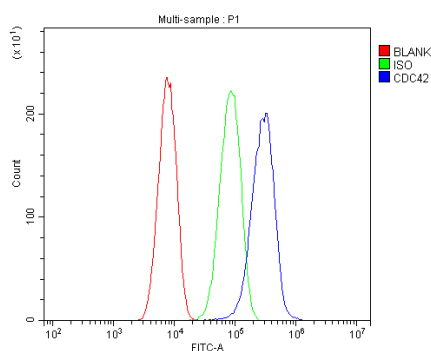
Western blot analysis of CDC42 using anti-CDC42 antibody (A00119). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,  
Lane 2: human U937 whole cell lysates,  
Lane 3: human HL-60 whole cell lysates,  
Lane 4: human U2OS whole cell lysates,  
Lane 5: human U87 whole cell lysates,  
Lane 6: human K562 whole cell lysates,  
Lane 7: human HELA whole cell lysates,  
Lane 8: rat thymus tissue lysates,  
Lane 9: rat lung tissue lysates,  
Lane 10: mouse lung tissue lysates,  
Lane 11: mouse intestines tissue lysates,  
Lane 12: mouse SP2/0 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CDC42 antigen affinity purified polyclonal antibody (A00119) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CDC42 at approximately 21 kDa. The expected band size for CDC42 is at 21 kDa.



IHC analysis of CDC42 using anti-CDC42 antibody (A00119). CDC42 was detected in a paraffin-embedded section of human colon cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-CDC42 Antibody (A00119) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of SiHa cells using anti-CDC42 antibody (A00119).

Overlay histogram showing SiHa cells stained with A00119 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CDC42 Antibody (A00119) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.