

Product Name: KD-Validated CDC42 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01719**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 21.3kDa

Antigen Information

Gene Name	CDC42
Alternative Names	CDC42; Cell Division Cycle 42; CDC42Hs; G25K; Cell Division Control Protein 42 Homolog; GTP Binding Protein, 25kDa; G25K GTP-Binding Protein; DJ224A6.1.1 (Cell Division Cycle 42 (GTP-Binding Protein, 25kD)); DJ224A6.1.2 (Cell Division Cycle 42 (GTP-Binding Protein, 25kD)); Cell Division Cycle 42 (GTP Binding Protein, 25kDa); Cell Division Cycle 42 (GTP-Binding Protein, 25kD); Small GTP Binding Protein CDC42; Growth-Regulating Protein; EC 3.6.5.2; TKS
Gene ID	998.0
SwissProt ID	P60953
Immunogen	A synthetic peptide of human CDC42

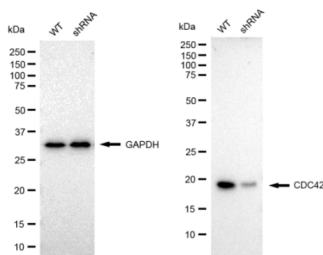
Background

The protein encoded by this gene 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. Pseudogenes of this gene have been identified on chromosomes 3, 4, 5, 7, 8 and 20. [provided by RefSeq, Apr 2013]

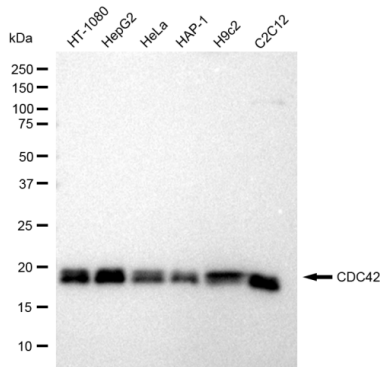
Research Area

Cell Biology, Signal Transduction, Epigenetics and Nuclear Signaling, Cancer

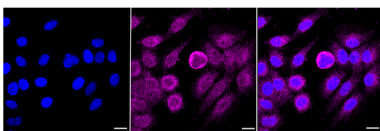
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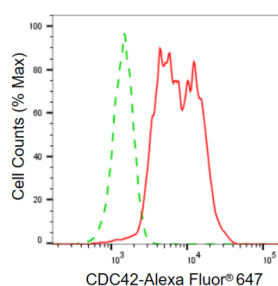
Western blotting analysis using CDC42 antibody (KVA01719). CDC42 expression in wild type (WT) and CDC42 shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. GAPDH serves as a loading control. The blot was incubated with CDC42 antibody (KVA01719, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using CDC42 antibody (KVA01719). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with CDC42 antibody (KVA01719, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with CDC42 antibody (KVA01719, 1:1,000). Nuclei were stained blue with DAPI; CDC42 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Flow cytometric analysis of CDC42 expression in HepG2 cells using CDC42 antibody (KVA01719, 1:2,000). Green, isotype control; red, CDC42.

