[KD Validated] Anti-CDC42 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R021119

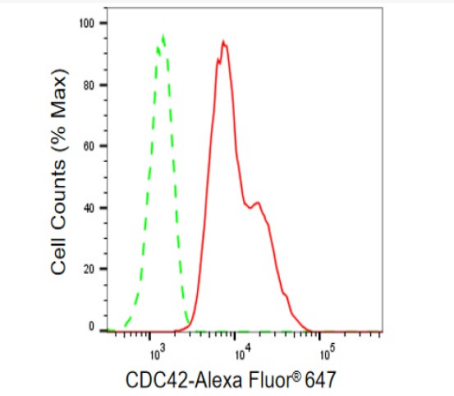
Product Information

Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	47N62S93
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human CDC42
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-CDC42 Rabbit mAb [47N62S93] is for research use only and not for use in diagnostic or therapeutic procedures.

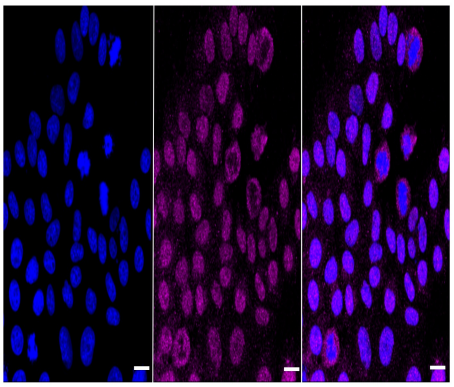
Protein Information

Synonyms	CDC42; Cell Division Cycle 42; Cell Division Control Protein 42 Homolog; G25K GTP-Binding Protein; DJ224A6.1.1 (Cell Division Cycle 42 (GTP-Binding Protein, 25kD)); 25kDa; DJ224A6.1.2 (Cell Division Cycle 42 (GTP-Binding Protein, 25kD)); Cell Division Cycle 42 (GTP Binding Protein, 25kDa); Growth-Regulating Protein; Cell Division Cycle 42 (GTP-Binding Protein, 25kD); GTP Binding Protein; 25kDa; GTP Binding Protein; GTP-Binding Protein; 25kD; CDC42Hs; Small GTP Binding Protein CDC42; G25K.
Calculated MW	Calculated MW: 21 kDa, Observed MW: 21 kDa
Uniprot ID	P60953
Gene ID	998
Background	The protein encoded by this gene is a GTPase which belongs to the RAS superfamily of small GTP-binding proteins. Members of this superfamily appear to regulate a diverse array of cellular events, including the control of cell growth, cytoskeletal reorganization, and the activation of protein kinases. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]
Cellular Location	Cell membrane.Lipid-anchor.Cytoplasmic side.Cytoplasm.Cytoskeleton.Microtubule organizing center.Centrosome.Cytoplasm.Cytoskeleton.Spindle.Midbody.Cell projection.Dendrite.Localizes to spindle during prometaphase cells. Moves to the central spindle as cells progressed through anaphase to telophase (PubMed:15642749). Localizes at the end of cytokinesis in the intercellular bridge formed between two daughter cells (PubMed:15642749). Its localization is regulated by the activities of guanine nucleotide exchange factor ECT2 and GTPase activating protein RACGAP1 (PubMed:15642749).

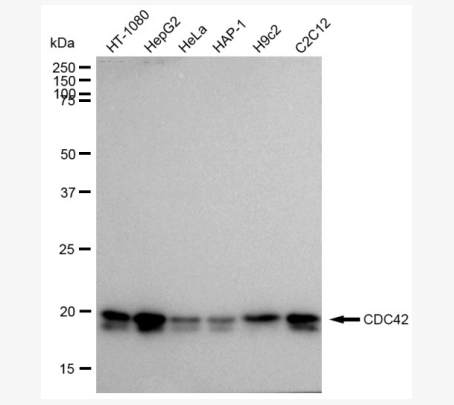
Validation Images



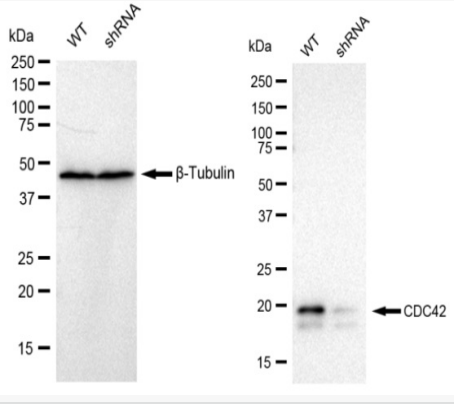
Flow cytometric analysis of CDC42 expression in HepG2 cells using CDC42 antibody (R021119, 1:2,000). Green, isotype control; red, CDC42.



Immunocytochemical staining of HepG2 cells with CDC42 antibody (R021119, 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.



Western blotting analysis using CDC42 antibody (R021119). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with CDC42 antibody (R021119, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using CDC42 antibody (R021119). CDC42 expression in wild type (WT) and CDC42 shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with CDC42 antibody (R021119, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.