

CDC42 Polyclonal Antibody

Catalog No :	YN1574
Reactivity :	Human;Mouse;Rat
Applications :	WB;ELISA
Target :	CDC42
Fields :	>>MAPK signaling pathway;>>Ras signaling pathway;>>Rap1 signaling pathway;>>Chemokine signaling pathway;>>Endocytosis;>>Axon guidance;>>VEGF signaling pathway;>>Focal adhesion;>>Adherens junction;>>Tight junction;>>T cell receptor signaling pathway;>>Fc gamma R-mediated phagocytosis;>>Leukocyte transendothelial migration;>>Neurotrophin signaling pathway;>>Regulation of actin cytoskeleton;>>GnRH signaling pathway;>>Non-alcoholic fatty liver disease;>>AGE-RAGE signaling pathway in diabetic complications;>>Bacterial invasion of epithelial cells;>>Epithelial cell signaling in Helicobacter pylori infection;>>Pathogenic Escherichia coli infection;>>Shigellosis;>>Salmonella infection;>>Yersinia infection;>>Human papillomavirus infection;>>Pathways in cancer;>>Viral carcinogenesis;>>Proteoglycans in cancer;>>Renal cell carcinoma;>>Pancreatic cancer;>>Lipid and atherosclerosis
Gene Name :	CDC42
Protein Name :	Cell division control protein 42 homolog (G25K GTP-binding protein)
Human Gene Id :	998
Human Swiss Prot No :	P60953
Mouse Swiss Prot No :	P60766
Rat Swiss Prot No :	Q8CFN2
Immunogen :	Synthesized peptide derived from human protein . at AA range: 80-160
Specificity :	CDC42 Polyclonal Antibody detects endogenous levels of protein.
Formulation :	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.

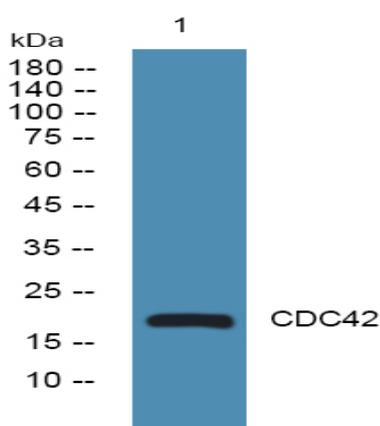
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000 ELISA 1:5000-20000
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	21kD
Cell Pathway :	MAPK_ERK_Growth;MAPK_G_Protein;Chemokine;Endocytosis;Axon guidance;VEGF;Focal adhesion;Adherens_Junction;Adherens_Junction;T_Cell_Receptor;Fc gamma R-mediated phagocytosis;Leukocyte transendothelial m
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 <i>Saccharomyces cerevisiae</i> Cdc 42, and is able to complement the yeast <i>cdc42-1</i> mutant. The product of oncogene <i>Dbl</i> 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],
Function :	enzyme regulation:Regulated by guanine nucleotide exchange factors (GEFs) which promote the exchange of bound GDP for free GTP, GTPase activating proteins (GAPs) which increase the GTP hydrolysis activity, and GDP dissociation inhibitors which inhibit the dissociation of the nucleotide from the GTPase.,function:Plasma membrane-associated small GTPase which cycles between an active GTP-bound and an inactive GDP-bound state. In active state binds to a variety of effector proteins to regulate cellular responses. Involved in epithelial cell polarization processes. Causes the formation of thin, actin-rich surface projections called filopodia.,similarity:Belongs to the small GTPase superfamily. Rho family.,similarity:Belongs to the small GTPase superfamily. Rho family. CDC42 subfamily.,subunit:The GTP-bound form interacts with CCPG1 (By similarity). Interacts with CDC42EP1, CDC42EP2, CDC42EP3,
Subcellular 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). Colocalizes with NEK6 in the centrosome (PubMed:20873783). In its active GTP-bound form localizes to the leading edge membrane of migrating dendritic cells (By similarity). .

Expression :

Brain,Cajal-Retzius cell,Cervix,Embryo,Fetal brain,Fetal brain cortex,Placenta,Uter

Products Images



Western blot analysis of lysates from U2OS cells, primary antibody was diluted at 1:1000, 4° over night