CDC42-GTP

Anti-Cdc42GTP Mouse Monoclonal Antibody

Cat. #: 26905

Size: 30 µL

Gene Symbol: CDC42

Description: Anti-Cdc42-GTP Monoclonal Antibody

Background: Small GTPases are a super-family of cellular signaling regulators. Cdc42 GTPase belongs to the Rho sub-family of GTPases that regulate cell motility, cell division, and gene transcription. GTP binding increases the activity of Cdc42, and the hydrolysis of GTP to GDP renders it inactive. GTP hydrolysis is aided by GTPase activating proteins (GAPs), while exchange of GDP for GTP is facilitated by guanine nucleotide exchange factors (GEFs).

Immunogen: Recombinant full length protein of active Cdc42

Applications: IP, IHC and IF (**Not applicable for WB since SDS denatures the Cdc42GTP**)

Published Applications: IF, IHC; Click for Details - Part 01 Part 02

Recommended Dilutions:
IP: 1 µg for 1~2 mg total cellular proteins
IHC, IF: 1:50-1:250

Concentration: 1 mg/ml

Host Species: Mouse

Format: Liquid

Clonality: Monoclonal

Isotype: IgG1

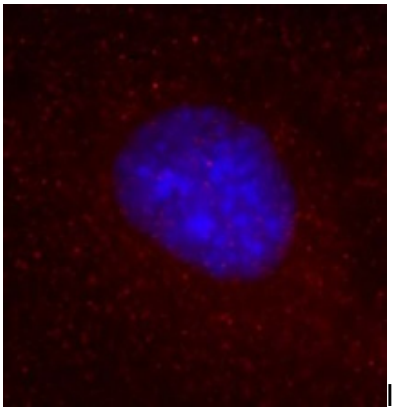
Purity: Purified from ascites

Preservative: No

Constituents: PBS (without Mg^{2+} and Ca^{2+}), pH 7.4, 150 mM NaCl, 50% glycerol

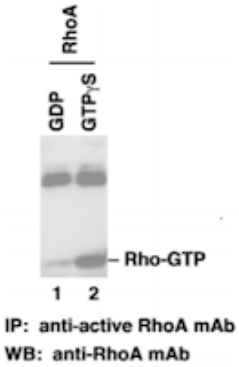
Species Reactivity: Anti-Cdc42-GTP monoclonal antibody recognizes active Cdc42 from vertebrates.

Storage Conditions: Store at -20°C. Avoid repeated freezing and thawing

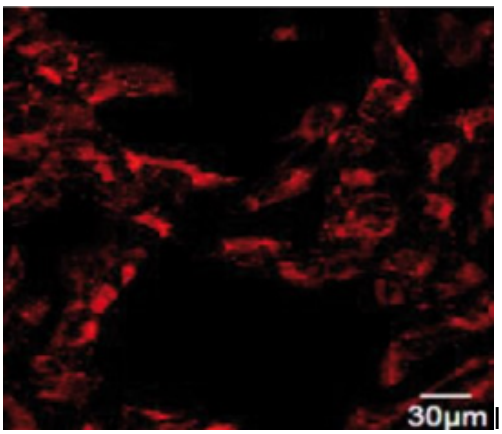


Immunofluorescent labeling of Cdc42-GTP in MS1 mouse endothelial cells. The MS1 cells cultured on glass coverslips (Fisher) in DMEM containing 5% FBS were fixed with 4% paraformaldehyde for 10 minutes at RT (room temperature) and permeabilized in PBSN (PBS+0.1%NP40) for 15 minutes at RT. The cells were stained with primary antibody (Cdc42-GTP) at 1:25 dilution in Invitrogen's CAS-BLOCK (00-8120) reagent at RT for 1 hour. After brief washing in PBSN (3x5min), a secondary Alexa555 conjugated goat anti mouse antibody (Invitrogen A21424) was applied in 1:200 in CAS-BLOCK at RT for 1 hour. The coverslips were then washed in PBSN (3x5min) and mounted using vectorsheld's hard set mounting medium (H-1500), and examined using a Zeiss inverted fluorescence microscope.

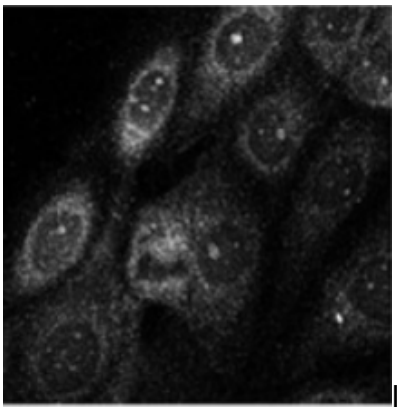
Immunoprecipitation/Western blot:



Purified recombinant Cdc42 proteins were loaded with GDP (lane 1) or GTPγS (lane 2). These proteins were immunoprecipitated with anti-Cdc42-GTP mouse monoclonal antibody (Cat. # 26905). After SDS/PAGE, the membrane filter was probed with anti-Cdc42 mouse monoclonal antibody (Cat. # 26008).



Immunofluorescence staining of h-iNPCE cells with anti-Cdc42GTP mAbs shown as red



Immunofluorescence staining of HCE cells with anti-Cdc42GTP mAbs