## BACKGROUND

The superfamily of GTP-binding proteins, for which the Ras proteins are prototypes, has been implicated in regulation of diverse biological activities involving various aspects of cell growth and division. One mammalian member of the family, Cdc42, has an amino acid sequence that is similar to those of various members of the Ras superfamily proteins, including N -, K- and H-Ras, Rho proteins and the Rac proteins. On the basis of in vitro phosphorylation studies, it has been suggested that human Cdc42 may function in the signaling pathway of the EGF receptor or related growth factor receptor protein kinases. The Dbl oncogene has been shown to specifically catalyze dissociation of GDP from human Cdc42.

## REFERENCES

1. Evans, T., et al. 1986. Purification of the major GTP-binding proteins from human placental membranes. J. Biol. Chem. 261: 7052-7059.
2. Hall, A. 1990. The cellular functions of small GTP-binding proteins. Science 249: 635-640.

## CHROMOSOMAL LOCATION

Genetic locus: CDC42 (human) mapping to 1 p36.12; Cdc42 (mouse) mapping to 4 D3.

## SOURCE

Cdc42 (L-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C -terminus of Cdc 42 of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{glgG}$ in 1.0 ml of PBS with < $0.1 \%$ sodium azide and $0.1 \%$ gelatin.

Blocking peptide available for competition studies, sc-34315 P, (100 $\mu \mathrm{g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \% \mathrm{BSA})$.

## APPLICATIONS

Cdc42 (L-13) is recommended for detection of Cdc42 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Cdc42 (L-13) is also recommended for detection of Cdc42 in additional species, including equine, canine, bovine, porcine and avian.
Suitable for use as control antibody for Cdc42 siRNA (h): sc-29256, Cdc42 siRNA (m): sc-29257, Cdc42 shRNA Plasmid (h): sc-29256-SH, Cdc42 shRNA Plasmid (m): sc-29257-SH, Cdc42 shRNA (h) Lentiviral Particles: sc-29256-V and Cdc42 shRNA (m) Lentiviral Particles: sc-29257-V.

Molecular Weight of Cdc42: 25 kDa .
Positive Controls: Jurkat whole cell lysate: sc-2204, 3611-RF whole cell lysate: sc-2215 or HeLa whole cell lysate: sc-2200.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:1001:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



Cdc42 (L-13): sc-34315. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing cytoplasmic and membrane staining of glandular cells.

## STORAGE

Store at $4^{\circ} \mathrm{C},{ }^{* *}$ DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

Try Cdc42 (B-8): sc-8401 or Cdc42 (B-9): sc-390210, our highly recommended monoclonal aternatives to Cdc42 (L-13). Also, for AC, HRP, FITC, PE, Alexa Fluor ${ }^{\circledR}$ 488 and Alexa Fluor ${ }^{\circledR} 647$ conjugates, see Cdc42 (B-8): sc-8401.

