# Cdc42 (C-20): sc-6083



The Power to Question

# **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.

# CHROMOSOMAL LOCATION

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

#### **SOURCE**

Cdc42 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Cdc42 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6083 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

Cdc42 (C-20) 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), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (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 (C-20) 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: Cdc42 (h): 293T Lysate: sc-110467, 3611-RF whole cell lysate: sc-2215 or Jurkat whole cell lysate: sc-2204.

# **RESEARCH USE**

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

# **PROTOCOLS**

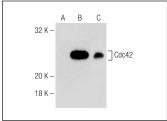
See our web site at www.scbt.com or our catalog for detailed protocols and support products.

#### **STORAGE**

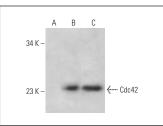
Jurkat (C) whole cell lysates.

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# **DATA**







Cdc42 (C-20): sc-6083. Western blot analysis of Cdc42 expression in non-transfected 293T: sc-117752 (**A**), human Cdc42 transfected 293T: sc-110467 (**B**) and Jurkat (**C**) whole cell Ivsates.

# **SELECT PRODUCT CITATIONS**

- Teckchandani, A.M., et al. 2001. c-Cbl facilitates Fibronectin matrix production by v-Abl-transformed NIH/3T3 cells via activation of small GTPases. Oncogene 20: 1739-1755.
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- 4. Bunney, T.D., et al. 2009. Structural insights into formation of an active signaling complex between Rac and phospholipase  $C\gamma 2$ . Mol. Cell 34: 223-233.
- Jin, L., et al. 2009. Nm23-H1 regulates the proliferation and differentiation of the human chronic myeloid leukemia K-562 cell line: a functional proteomics study. Life Sci. 84: 458-467.
- Anitei M, et al. 2010. Protein complexes containing CYFIP/Sra/PIR121 coordinate Arf1 and Rac1 signalling during clathrin-AP-1-coated carrier biogenesis at the TGN. Nat. Cell Biol. 12: 330-340.
- Elali, A., et al. 2011. Liver X receptor activation enhances blood-brain barrier integrity in the ischemic brain and increases the abundance of ATP-binding cassette transporters ABCB1 and ABCC1 on brain capillary cells. Brain Pathol. 22: 175-187.
- Doi, T., et al. 2011. Alteration of gene expression of IQGAP1 and Rhofamily GTPases in the cadmium-induced ventral body wall defects in the chick model. Reprod. Toxicol. 32: 124-128.



Try **Cdc42** (**B-8**): **sc-8401** or **Cdc42** (**B-9**): **sc-390210**, our highly recommended monoclonal aternatives to Cdc42 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **Cdc42** (**B-8**): **sc-8401**.