

# CdcA1 (N-13): sc-103429

## BACKGROUND

Kinetochores play an essential role in chromosome segregation by forming dynamic connections with spindle microtubules. Cell division associated 1 (CdcA1) is a member of the evolutionarily conserved centromere protein complex along with kinetochore associated 2 (KNTC2), and these two proteins are involved in the regulation of cell-cycle progression. The novel human cell cycle genes CdcA1 through CdcA8 are co-expressed with the well-known cell cycle genes including Cdc2, Cdc7, Cdc23, cyclin and MCAK. Both CdcA1 and KNTC2 are implicated in non-small cell lung carcinomas (NSCLC), and selective suppression of CdcA1 or KNTC2 activity and/or inhibition of the CdcA1-KNTC2 complex formation may be a promising therapeutic target for treatment of lung cancers.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NUF2 (human) mapping to 1q23.3; Nuf2 (mouse) mapping to 1 H2.3.

## SOURCE

CdcA1 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CdcA1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103429 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CdcA1 (N-13) is recommended for detection of CdcA1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

CdcA1 (N-13) is also recommended for detection of CdcA1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for CdcA1 siRNA (h): sc-72839, CdcA1 siRNA (m): sc-72840, CdcA1 shRNA Plasmid (h): sc-72839-SH, CdcA1 shRNA Plasmid (m): sc-72840-SH, CdcA1 shRNA (h) Lentiviral Particles: sc-72839-V and CdcA1 shRNA (m) Lentiviral Particles: sc-72840-V.

Molecular Weight of CdcA1: 53 kDa.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **CdcA1 (E-6): sc-271251**, our highly recommended monoclonal alternative to CdcA1 (N-13).