SANTA CRUZ BIOTECHNOLOGY, INC.

CINP (AT1G10): sc-517393

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The Power to Question

BACKGROUND

Cell cycle progression is controlled in part by a family of cyclin proteins and cyclin dependent kinases (Cdks). Cdk proteins work in concert with the cyclins to phosphorylate key substrates involved in each phase of cell cycle progression. Specifically, Cdk2 interacts with Cyclins A, B1, B3, D, or E to control cell cycle progression. The Cyclin-dependent kinase 2-interacting protein (CINP) interacts with components of the replication complex and Cdk2 and Cdc7, thereby providing a functional and physical link between Cdk2 and Cdc7 during firing of the origins of replication. However, CINP is phopshorylated by Cdc7, but not by Cdk2. CINP also interacts with ATR-interacting protein and regulates ATR-dependent signaling, resistance to replication stress and G_2 checkpoint integrity.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CINP (human) mapping to 14q32.31.

SOURCE

CINP (AT1G10) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 1-212 of CINP of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide, 1% glycerol and 0.1% gelatin.

APPLICATIONS

CINP (AT1G10) is recommended for detection of CINP of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CINP siRNA (h): sc-92209, CINP shRNA Plasmid (h): sc-92209-SH and CINP shRNA (h) Lentiviral Particles: sc-92209-V.

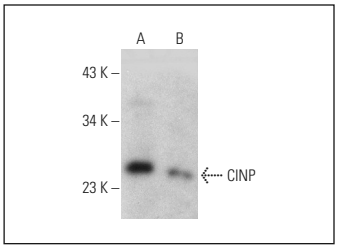
Molecular Weight of CINP: 24 kDa.

Positive Controls: CCRF-CEM nuclear extract: sc-2146 or Jurkat nuclear extract: sc-2132.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



CINP (AT1G10): sc-517393. Western blot analysis of CINP expression in CCRF-CEM (**A**) and Jurkat (**B**) nuclear extracts.

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 for detailed protocols and support products.