SANTA CRUZ BIOTECHNOLOGY, INC.

CdcA4 (A-15): sc-79896

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The Power to Question

BACKGROUND

The eukaryotic cell division cycle consists of a number of gene-controlled sequences that involve cyclin dependent kinases (Cdks) and cell division cycle (Cdc) proteins. CdcA4 (cell division cycle associated 4), also known as HEPP (Hematopoietic progenitor protein), is a 241 amino acid protein that contains one SERTA domain and belongs to the E2F family of transcription factors. Localized to the nucleus, CdcA4 participates in the E2F/retinoblastoma pathway and regulates E2F-dependent transcriptional activation and cell proliferation. Additionally, CdcA4 is thought to be involved in spindle pole organization, possibly acting as a midzone factor involved in cytokinesis and chromosome segregation. CdcA4 can also regulate JUN oncogene expression, suggesting a role for CdcA4 in cellular transformation events that lead to tumor development. Multiple isoforms of CdcA4 exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CDCA4 (human) mapping to 14q32.33; Cdca4 (mouse) mapping to 12 F1.

SOURCE

CdcA4 (A-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CdcA4 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-79896 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CdcA4 (A-15) is recommended for detection of CdcA4 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CdcA4 (A-15) is also recommended for detection of CdcA4 in additional species, including bovine.

Suitable for use as control antibody for CdcA4 siRNA (h): sc-72841, CdcA4 siRNA (m): sc-72842, CdcA4 shRNA Plasmid (h): sc-72841-SH, CdcA4 shRNA Plasmid (m): sc-72842-SH, CdcA4 shRNA (h) Lentiviral Particles: sc-72841-V and CdcA4 shRNA (m) Lentiviral Particles: sc-72842-V.

Molecular Weight of CdcA4: 26 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

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: 1:100-1:400) 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 or our catalog for detailed protocols and support products.