SANTA CRUZ BIOTECHNOLOGY, INC.

CENP-H (T-17): sc-31325

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

A replicated chromosome includes two kinetochores that control chromosome segregation during mitosis. Both centromere proteins CENP-B and CENP-H are contained in the centromeric heterochromatin between kinetochores, and are involved in maintaining sister chromatid cohesion. The highly dispersed CENP-B promotes and maintaines the joining of DNA satellites in the centromere. CENP-B targets centromeric α-DNA and protects it from digestion by nucleases as well as preventing DNAse or restriction enzyme digestion from affecting the morphology of centromeres. CENP-H contains a coiled-coil structure and a nuclear localization signal. CENP-H is specifically and constitutively localized to kinetochores and plays a role in the organization and function of kinetochores throughout the cell cycle.

REFERENCES

1. Cooke, C.A., Bernat, R.L. and Earnshaw, W.C. 1990. CENP-B: a major human centromere protein located beneath the kinetochore. J. Cell Biol. 110: 1475-1488.
2. Rieder, C.L. and Salmon, E.D. 1998. The vertebrate cell kinetochore and its roles during mitosis. Trends Cell Biol. 8: 310-318.

CHROMOSOMAL LOCATION

Genetic locus: CENPH (human) mapping to 5p13.2; Cenph (mouse) mapping to 13 D1.

SOURCE

CENP-H (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CENP-H of mouse 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-31325 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CENP-H (T-17) is recommended for detection of CENP-H of mouse, rat and, to a lesser extent, 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).

CENP-H (T-17) is also recommended for detection of CENP-H in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for CENP-H siRNA (h): sc-37565, CENP-H siRNA (m): sc-37566, CENP-H shRNA Plasmid (h): sc-37565-SH, CENP-H shRNA Plasmid (m): sc-37566-SH, CENP-H shRNA (h) Lentiviral Particles: sc-37565-V and CENP-H shRNA (m) Lentiviral Particles: sc-37566-V.

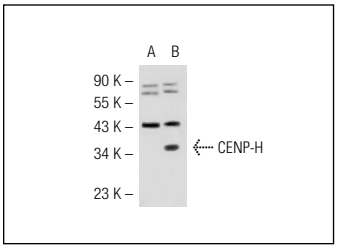
Molecular Weight of CENP-H: 33 kDa.

Positive Controls: rat testis extract: sc-2400.

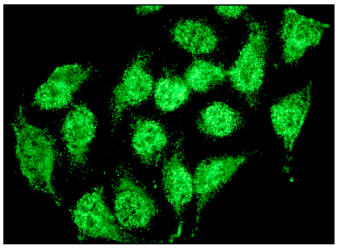
RECOMMENDED SECONDARY REAGENTS

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.

DATA



CENP-H (T-17): sc-31325. Western blot analysis of CENP-H expression in non-transfected: sc-117752 (**A**) and human CENP-H transfected: sc-113785 (**B**) 293T whole cell lysates.



CENP-H (T-17): sc-31325. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

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.