

CENP-H (FL-247): sc-22792

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 maintains 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 5q13.2; Cenph (mouse) mapping to 13 D1.

SOURCE

CENP-H (FL-247) is a rabbit polyclonal antibody raised against amino acids 1-247 representing full length CENP-H of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

CENP-H (FL-247) is recommended for detection of CENP-H of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

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.

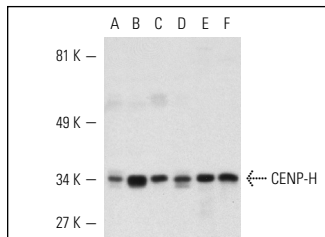
Molecular Weight of CENP-H: 33 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, CENP-H (h2): 293T Lysate: sc-113785 or HeLa nuclear extract: sc-2120.

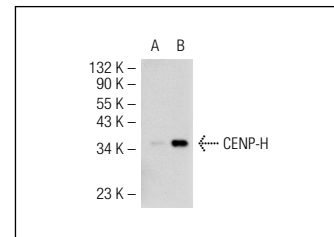
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



CENP-H (FL-247): sc-22792. Western blot analysis of CENP-H expression in HeLa (A), NIH/3T3 (B) and Jurkat (C) nuclear extracts, HeLa whole cell lysate (D) and rat testis (E) and mouse embryo (F) tissue extracts.



CENP-H (FL-247): sc-22792. 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.

SELECT PRODUCT CITATIONS

1. Wan, X.B., Zhao, Y., Fan, X.J., Cai, H.M., Zhang, Y., Chen, M.Y., Xu, J., Wu, X.Y., Li, H.B., Zeng, Y.X., Hong, M.H. and Liu, Q. 2012. Molecular prognostic prediction for locally advanced nasopharyngeal carcinoma by support vector machine integrated approach. *PLoS ONE* 7: e31989.

STORAGE

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

PROTOCOLS

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



Try **CENP-H (G-9): sc-365222** or **CENP-H (5): sc-136403**, our highly recommended monoclonal alternatives to CENP-H (FL-247).