

CENP-H (h2): 293T Lysate: sc-113785

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

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3. Barbosa-Cisneros, O., et al. 1998. Localization of the centromere protein CENP-B using scleroderma sera and evidence for a role in centromere survival. *Rev. Rhum. Engl. Ed.* 65: 15-20.
4. Sugata, N., et al. 1999. Characterization of a novel kinetochore protein, CENP-H. *J. Biol. Chem.* 274: 27343-27346.
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6. Izuta, H., et al. 2006. Comprehensive analysis of the ICEN (interphase centromere complex) components enriched in the CENP-A chromatin of human cells. *Genes Cells* 11: 673-684.
7. Orthaus, S., et al. 2006. RNAi knockdown of human kinetochore protein CENP-H. *Biochem. Biophys. Res. Commun.* 348: 36-46.
8. Shigeishi, H., et al. 2006. Increased expression of CENP-H gene in human oral squamous cell carcinomas harboring high-proliferative activity. *Oncol. Rep.* 16: 1071-1075.
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CHROMOSOMAL LOCATION

Genetic locus: CENPH (human) mapping to 5q13.2.

PRODUCT

CENP-H (h2): 293T Lysate represents a lysate of human CENP-H transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

CENP-H (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive CENP-H antibodies. Recommended use: 10-20 μ l per lane.

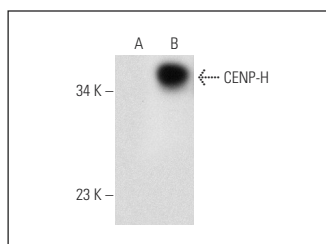
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CENP-H (G-9): sc-365222 is recommended as a positive control antibody for Western Blot analysis of enhanced human CENP-H expression in CENP-H transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA



CENP-H (G-9): sc-365222. 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.

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.