

CENP-C (H-300): sc-22789

BACKGROUND

A replicated chromosome includes two kinetochores that control chromosome segregation during mitosis. The evolutionarily conserved centromere protein-C, CENP-C, is a kinetochore assembly protein. CENP-C is located on the fibers of the kinetochore and constitutes a kinetochore organizing center that tightly associates with DNA. CENP-C is necessary for the formation of a functional centromere, which indicates that CENP-C is important for mitotic progression. In addition, CENP-C is lost from centromeres during herpes simplex virus 1 infection, causing substantial structural changes in the kinetochore, which suggests that the structure of CENP-C is regulated during the cell cycle.

REFERENCES

1. Rieder, C.L., et al. 1998. The vertebrate cell kinetochore and its roles during mitosis. *Trends Cell Biol.* 8: 310-318.
2. Fukagawa, T., et al. 1999. CENP-C is necessary but not sufficient to induce formation of a functional centromere. *EMBO J.* 18: 4196-4209.
3. Sugimoto, K., et al. 1999. Visualization of prekinetochore locus on the centromeric region of highly extended chromatin fibers: does kinetochore autoantigen CENP-C constitute a kinetochore organizing center? *Chromosome Res.* 7: 9-19.

CHROMOSOMAL LOCATION

Genetic locus: CENPC1 (human) mapping to 4q13.2; Cenpc1 (mouse) mapping to 5 E1.

SOURCE

CENP-C (H-300) is a rabbit polyclonal antibody raised against amino acids 644-943 mapping at the C-terminus of CENP-C 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.

APPLICATIONS

CENP-C (H-300) is recommended for detection of CENP-C of human and, to a lesser extent, mouse and rat 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).

Suitable for use as control antibody for CENP-C siRNA (h): sc-37559, CENP-C siRNA (m): sc-37560, CENP-C shRNA Plasmid (h): sc-37559-SH, CENP-C shRNA Plasmid (m): sc-37560-SH, CENP-C shRNA (h) Lentiviral Particles: sc-37559-V and CENP-C shRNA (m) Lentiviral Particles: sc-37560-V.

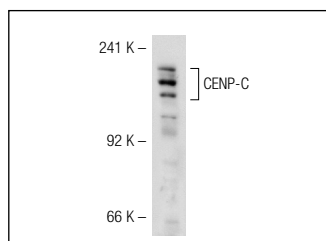
Molecular Weight of CENP-C: 140 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or HeLa nuclear extract: sc-2120.

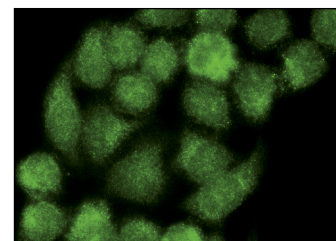
RECOMMENDED SECONDARY REAGENTS

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-C (H-300): sc-22789. Western blot analysis of CENP-C expression in HeLa whole cell lysate.



CENP-C (H-300): sc-22789. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Hsu, S., et al. 2005. Inhibition of autoantigen expression by (-)-epigallocatechin-3-gallate (the major constituent of green tea) in normal human cells. *J. Pharmacol. Exp. Ther.* 315: 805-811.

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.

MONOS
Satisfaction
Guaranteed

Try **CENP-C (C-6): sc-166099**, our highly recommended monoclonal alternative to CENP-C (H-300).