SANTA CRUZ BIOTECHNOLOGY, INC.

# CENP-I (D-13): sc-131455

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*The Power to Question*

## BACKGROUND

A replicated chromosome includes two kinetochores that control chromosome segregation during mitosis.The CENPA-CAD complex is recruited to centromeres where it is involved in assembly of kinteochore proteins, chromosome segregation and mitotic progression. As a component of the CENPA-CAD complex, CENP-I (centromere protein I), also known as ICEN19 (interphase centromere complex protein 19), FSHPRH1 (follicle-stimulating hormone primary response protein) and LRPR1 (leucine-rich primary response protein 1), is a 756 amino acid protein that is involved in the incorporation of newly synthesized CENP-A into centrosomes. CENP-I is also required for localization of MAD2, MAD1L1 and CENP-F to kinteochores, an essential event for mitosis. Transcription of the CENP-I gene is rapidly activated in response to follicle-stimulating hormone (FSH) and may therefore play a role in gonadal development. There are two isoforms of CENP-I that are produced as a result of alternative splicing events.

## REFERENCES


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3. Liu, S.T., et al. 2003. Human CENP-I specifies localization of CENP-F, MAD1 and MAD2 to kinetochores and is essential for mitosis. Nat. Cell Biol. 5: 341-345.
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5. Okada, M., et al. 2006. The CENP-H-I complex is required for the efficient incorporation of newly synthesized CENP-A into centromeres. Nat. Cell Biol. 8: 446-457.
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7. Nousiainen, M., et al. 2006. Phosphoproteome analysis of the human mitotic spindle. Proc. Natl. Acad. Sci. USA 103: 5391-5396.
8. Nakazawa, N., et al. 2008. Dissection of the essential steps for condensin accumulation at kinetochores and rDNAs during fission yeast mitosis. J. Cell Biol. 180: 1115-1131.
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## CHROMOSOMAL LOCATION

Genetic locus: Cenpi (mouse) mapping to X E3.

## RESEARCH USE

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

## SOURCE

CENP-I (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CENP-I 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-131455 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CENP-I (D-13) is recommended for detection of CENP-I of mouse and rat 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); non cross-reactive with other CENP family members.

Suitable for use as control antibody for CENP-I siRNA (m): sc-142263, CENP-I shRNA Plasmid (m): sc-142263-SH and CENP-I shRNA (m) Lentiviral Particles: sc-142263-V.

Molecular Weight of CENP-I: 86 kDa.

## 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.

## PROTOCOLS

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