

CENP-I (G-16): sc-131456

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 kinetochore 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 kinetochores, 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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CHROMOSOMAL LOCATION

Genetic locus: CENPI (human) mapping to Xq22.1.

RESEARCH USE

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

SOURCE

CENP-I (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CENP-I 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.

Blocking peptide available for competition studies, sc-131456 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CENP-I (G-16) is recommended for detection of CENP-I isoforms 1 and 2 of human 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.

CENP-I (G-16) is also recommended for detection of CENP-I isoforms 1 and 2 in additional species, including equine and canine.

Suitable for use as control antibody for CENP-I siRNA (h): sc-91123, CENP-I shRNA Plasmid (h): sc-91123-SH and CENP-I shRNA (h) Lentiviral Particles: sc-91123-V.

Molecular Weight of CENP-I: 86 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, SK-N-SH cell lysate: sc-2410 or PC-3 cell lysate: sc-2220.

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.