

CENP-S (S-13): sc-167452

BACKGROUND

Centromere protein S (CENP-S), also known as apoptosis-inducing TAF9-like domain-containing protein 1 (APITD1), is a 138 amino acid protein belonging to the TAF9 family. Localized exclusively to centromeres, CENP-S is a component of the CENP-CAD (nucleosome distal) complex. This complex interacts with the CENP-NAC complex in centromeres and is involved in assembly of kinetochore proteins, mitotic progression and chromosome segregation. CENP-S was found to be expressed at low levels in neuroblastoma cells, indicating a possible role in a cell death pathway. Ubiquitously expressed, CENP-S exists as three isoforms produced by alternative splicing.

REFERENCES

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2. Okada, M., Cheeseman, I.M., Hori, T., Okawa, K., McLeod, I.X., Yates, J.R., Desai, A. and Fukagawa, T. 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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CHROMOSOMAL LOCATION

Genetic locus: APITD1 (human) mapping to 1p36.22; Apitd1 (mouse) mapping to 4 E2.

SOURCE

CENP-S (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CENP-S 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-167452 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

CENP-S (S-13) is recommended for detection of CENP-S of mouse, rat and 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.

Suitable for use as control antibody for CENP-S siRNA (h): sc-105197, CENP-S siRNA (m): sc-142269, CENP-S shRNA Plasmid (h): sc-105197-SH, CENP-S shRNA Plasmid (m): sc-142269-SH, CENP-S shRNA (h) Lentiviral Particles: sc-105197-V and CENP-S shRNA (m) Lentiviral Particles: sc-142269-V.

Molecular Weight of CENP-S isoforms: 16/19/9 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.

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.