SANTA CRUZ BIOTECHNOLOGY, INC.

MIS12 (N-12): sc-107752

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Chromosome segregation requires assembly of kinetochores on centromeric chromatin to mediate interactions with spindle microtubules and control cell-cycle progression. MIS12 (minichromosome instability 12), also known as MTW1, hMis12, KNTC2AP or MIND kinetochore complex component homolog, is a 205 amino acid nuclear protein that is associated with the kinetochore. MIS12 is a component of the MIS12 complex, which is required for kinetochore formation during mitosis and normal chromosome alignment and segregation. The MIS12 complex consists of MIS12, DSN1, NSL1 and PMF-1. MIS12 is part of a network of complexes that provide microtubule attachment and generates pulling forces from depolymerization. MIS12 is encoded by a gene located on human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

REFERENCES

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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: MIS12 (human) mapping to 17p13.2; Mis12 (mouse) mapping to 11 B4.

SOURCE

MIS12 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of MIS12 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-107752 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MIS12 (N-12) is recommended for detection of MIS12 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).

Suitable for use as control antibody for MIS12 siRNA (h): sc-93889, MIS12 siRNA (m): sc-149443, MIS12 shRNA Plasmid (h): sc-93889-SH, MIS12 shRNA Plasmid (m): sc-149443-SH, MIS12 shRNA (h) Lentiviral Particles: sc-93889-V and MIS12 shRNA (m) Lentiviral Particles: sc-149443-V.

Molecular Weight of MIS12: 25 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.