SANTA CRUZ BIOTECHNOLOGY, INC.

GCP3 (G-19): sc-51498

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The γ-Tubulin complex is composed of γ Tubulin and the γ-Tubulin complex-associated proteins GCP2, GCP3, GCP4, GCP5 and GCP6, all of which are essential components of microtubule organizing centers. γ-Tubulin complex components are localized to both the centrosome, where they are involved in microtubule nucleation, and to the cytoplasm, where they exist as soluble complexes that can be recruited to the centrosome as needed. Although the GCP proteins are related, they have distinct roles which contribute to the proper function of the γ-Tubulin complex. GCP3 (γ-tubulin complex component 3), also known as TUBGCP3 or SPBC98, localizes to the centrosome and is an ubiquitously expressed 907 amino acid member of the γ-Tubulin complex. Like GCP2 and γ Tubulin, GCP3 is conserved in all eukaryotes, suggesting that it is part of a core unit involved in eukaryotic microtubule nucleation. Three isoforms of GCP3 exist due to alternative splicing events.

REFERENCES

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RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: TUBGCP3 (human) mapping to 13q34; Tubgcp3 (mouse) mapping to 8 A1.1.

SOURCE

GCP3 (G-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GCP3 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-51498 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GCP3 (G-19) is recommended for detection of γ-tubulin complex component 3 isoforms 1 and 2 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).

GCP3 (G-19) is also recommended for detection of γ-tubulin complex component 3 isoforms 1 and 2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for GCP3 siRNA (h): sc-77348, GCP3 siRNA (m): sc-77349, GCP3 shRNA Plasmid (h): sc-77348-SH, GCP3 shRNA Plasmid (m): sc-77349-SH, GCP3 shRNA (h) Lentiviral Particles: sc-77348-V and GCP3 shRNA (m) Lentiviral Particles: sc-77349-V.

Molecular Weight of GCP3: 104 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.