

GCP2 (H-300): sc-67251

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. GCP2 (γ -Tubulin complex component 2), also known as TUBGCP2 or SPBC97 (spindle pole body protein Spc97 homolog) is a ubiquitously expressed 902 amino acid protein that localizes to the centrosome and is involved in microtubule nucleation.

REFERENCES

- Murphy, S.M., et al. 1998. The mammalian γ -Tubulin complex contains homologues of the yeast spindle pole body components spc97p and spc98p. *J. Cell Biol.* 141: 663-674.
- Fava, F., et al. 1999. Human 76p: A new member of the γ Tubulin-associated protein family. *J. Cell Biol.* 147: 857-868.
- Hillman, R.T., et al. 2004. An unappreciated role for RNA surveillance. *Genome Biol.* 5: R8.

CHROMOSOMAL LOCATION

Genetic locus: TUBGCP2 (human) mapping to 10q26.3; Tubgcp2 (mouse) mapping to 7 F4.

SOURCE

GCP2 (H-300) is a rabbit polyclonal antibody raised against amino acids 131-430 mapping within an internal region of GCP2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GCP2 (H-300) is recommended for detection of γ -Tubulin complex component 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

GCP2 (H-300) is also recommended for detection of γ -tubulin complex component 2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GCP2 siRNA (h): sc-106882, GCP2 siRNA (m): sc-77387, GCP2 shRNA Plasmid (h): sc-106882-SH, GCP2 shRNA Plasmid (m): sc-77387-SH, GCP2 shRNA (h) Lentiviral Particles: sc-106882-V and GCP2 shRNA (m) Lentiviral Particles: sc-77387-V.

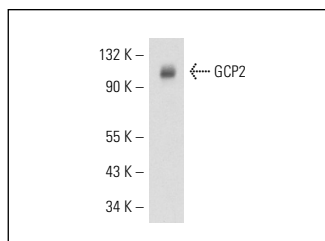
Molecular Weight of GCP2: 102 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GCP2 (H-300): sc-67251. Western blot analysis of GCP2 expression in MIA PaCa-2 whole cell lysate.

STORAGE

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

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.

MONOS
Satisfaction
Guaranteed

Try **GCP2 (F-3): sc-377117** or **GCP2 (D-5): sc-390116**, our highly recommended monoclonal alternatives to GCP2 (H-300).