

# GCP4 (H-300): sc-67253

## BACKGROUND

The  $\gamma$ -tubulin complex is composed of  $\gamma$  tubulin and the  $\gamma$ -tubulin complex-associated proteins GCP2, GCP3, GCP4, GCP5 and GCP6, all of which are essential components of microtubule organizing centers.  $\gamma$ -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  $\gamma$ -tubulin complex. GCP4 ( $\gamma$ -tubulin complex component 4), also known as TUBGCP4, is an ubiquitously expressed 667 amino acid member of the  $\gamma$ -tubulin complex that localizes to the metaphase spindle during mitosis. In response to proteasome inhibition, GCP4 exhibits increased accumulation at the pericentriolar material where it participates in microtubule organization and nucleation.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TUBGCP4 (human) mapping to 15q15.3; Tubgcp4 (mouse) mapping to 2 E5.

## SOURCE

GCP4 (H-300) is a rabbit polyclonal antibody raised against amino acids 11-310 mapping near the N-terminus of GCP4 of human origin.

## PRODUCT

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

## RESEARCH USE

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

## APPLICATIONS

GCP4 (H-300) is recommended for detection of  $\gamma$ -tubulin complex component 4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

GCP4 (H-300) is also recommended for detection of  $\gamma$ -tubulin complex component 4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for GCP4 siRNA (h): sc-77350, GCP4 siRNA (m): sc-77351, GCP4 shRNA Plasmid (h): sc-77350-SH, GCP4 shRNA Plasmid (m): sc-77351-SH, GCP4 shRNA (h) Lentiviral Particles: sc-77350-V and GCP4 shRNA (m) Lentiviral Particles: sc-77351-V.

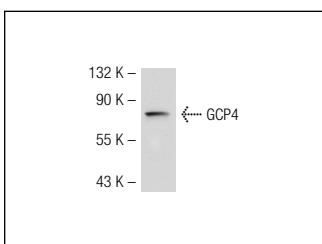
Molecular Weight of GCP4: 76 kDa.

Positive Controls: HCT-116 whole cell lysate or NIH/3T3 whole cell lysate: sc-2210.

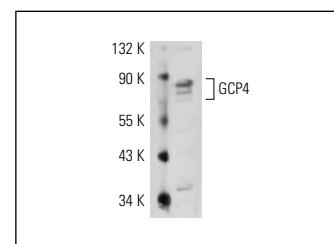
## RECOMMENDED SECONDARY REAGENTS

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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



GCP4 (H-300): sc-67253. Western blot analysis of GCP4 expression in NIH/3T3 whole cell lysate.



GCP4 (H-300): sc-67253. Western blot analysis of GCP4 expression in HCT-116 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.