

GCP5 (H-300): sc-67254

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. GCP5 (γ -Tubulin complex component 5), also known as TUBGCP5, is a 1,024 amino acid member of the γ -Tubulin complex and is highly expressed in heart and skeletal muscle. Defects in the gene encoding GCP5 are implicated in Prader-Willi syndrome (PWS), a rare genetic disorder associated with obesity, compulsive behavior and lower intellectual ability.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TUBGCP5 (human) mapping to 15q11.2; Tubgcp5 (mouse) mapping to 7 B5.

SOURCE

GCP5 (H-300) is a rabbit polyclonal antibody raised against amino acids 41-340 mapping near the N-terminus of GCP5 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

GCP5 (H-300) is recommended for detection of GCP5 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).

GCP5 (H-300) is also recommended for detection of GCP5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GCP5 siRNA (h): sc-105392, GCP5 siRNA (m): sc-77388, GCP5 shRNA Plasmid (h): sc-105392-SH, GCP5 shRNA Plasmid (m): sc-77388-SH, GCP5 shRNA (h) Lentiviral Particles: sc-105392-V and GCP5 shRNA (m) Lentiviral Particles: sc-77388-V.

Molecular Weight of GCP5: 118 kDa.

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.

SELECT PRODUCT CITATIONS

- Teixidó-Travesa, N., et al. 2010. The γ TuRC revisited: a comparative analysis of interphase and mitotic human γ TuRC redefines the set of core components and identifies the novel subunit GCP8. *Mol. Biol. Cell* 21: 3963-3972.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of



Try **GCP5 (E-1): sc-365837**, our highly recommended monoclonal alternative to GCP5 (H-300).