

γ Tubulin (C-20): sc-7396

BACKGROUND

Tubulin is a major cytoskeleton component that has five distinct forms, designated α , β , γ , δ and ϵ Tubulin. α and β Tubulins form heterodimers which multimerize to form a microtubule filament. Multiple β Tubulin isoforms (β 1, β 2, β 3, β 4, β 5, β 6 and β 8) have been characterized and are expressed in mammalian tissues. β 1 and β 4 are present throughout the cytosol, β 2 is present in the nuclei and nucleoplasm, and β 3 is a neuron-specific cytoskeletal protein. γ Tubulin forms the γ some, which is required for nucleating microtubule filaments at the centrosome. Both δ Tubulin and ϵ Tubulin are associated with the centrosome. δ Tubulin is a homolog of the *Chlamydomonas* δ Tubulin Uni3 and is found in association with the centrioles, whereas ϵ Tubulin localizes to the pericentriolar material. ϵ Tubulin exhibits a cell-cycle-specific pattern of localization, first associating with only the older of the centrosomes in a newly duplicated pair and later associating with both centrosomes.

CHROMOSOMAL LOCATION

Genetic locus: TUBG1/TUBG2 (human) mapping to 17q21.2; Tubg1/Tubg2 (mouse) mapping to 11 D.

SOURCE

γ Tubulin (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping C-terminus (h) of γ Tubulin of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7396 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-7396 AC, 500 μ g/0.25 ml agarose in 1 ml; as HRP conjugate for Western blotting, sc-7396 HRP, 200 μ g/1 ml; and as fluorescein (sc-7396 FITC) or rhodamine (sc-7396 TRITC) conjugates for immunofluorescence, 200 μ g/1 ml.

APPLICATIONS

γ Tubulin (C-20) is recommended for detection of γ Tubulin of mouse, rat, human and *Xenopus laevis* 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

γ Tubulin (C-20) is also recommended for detection of γ Tubulin in additional species, including equine, canine, bovine, porcine and avian.

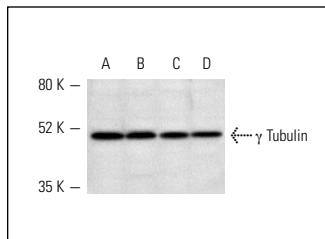
Suitable for use as control antibody for γ Tubulin siRNA (h): sc-29322, γ Tubulin siRNA (m): sc-29323, γ Tubulin shRNA Plasmid (h): sc-29322-SH, γ Tubulin shRNA Plasmid (m): sc-29323-SH, γ Tubulin shRNA (h) Lentiviral Particles: sc-29322-V and γ Tubulin shRNA (m) Lentiviral Particles: sc-29323-V.

Molecular Weight of γ Tubulin: 50 kDa.

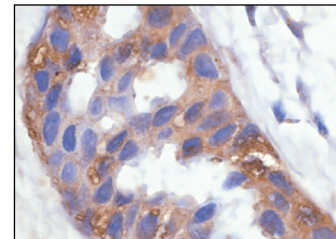
STORAGE

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

DATA



γ Tubulin (C-20): sc-7396. Western blot analysis of γ Tubulin expression in HeLa (A), A-431 (B), K-562 (C) and NIH/3T3 (D) whole cell lysates.



γ Tubulin (C-20): sc-7396. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast tumor showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

- Calabro, V., et al. 2002. The human MDM2 oncoprotein increases the transcriptional activity and the protein level of the p53 homolog p63. *J. Biol. Chem.* 277: 2674-2681.
- Taura, M., et al. 2011. MEF/ELF4 transactivation by E2F1 is inhibited by p53. *Nucleic Acids Res.* 39: 76-88.
- Kang, S.J., et al. 2011. Cytotoxicity and genotoxicity of titanium dioxide nanoparticles in UVA-irradiated normal peripheral blood lymphocytes. *Drug Chem. Toxicol.* 34: 277-284.
- Kim, K. and Rhee, K. 2011. The pericentriolar satellite protein CEP90 is crucial for integrity of the mitotic spindle pole. *J. Cell Sci.* 124: 338-347.
- Romeo, F., et al. 2011. BRCA1 is required for hMLH1 stabilization following doxorubicin-induced DNA damage. *Int. J. Biochem. Cell Biol.* 43: 1754-1763.
- Mittal, S., et al. 2011. The Ccr4a (CNOT6) and Ccr4b (CNOT6L) deadenylase subunits of the human Ccr4-Not complex contribute to the prevention of cell death and senescence. *Mol. Biol. Cell* 22: 748-758.
- Zhang, Y., et al. 2011. Identification of DHX33 as a mediator of rRNA synthesis and cell growth. *Mol. Cell. Biol.* 31: 4676-4691.

RESEARCH USE

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



Try γ Tubulin (C-11): sc-17787 or γ Tubulin (D-10): sc-17788, our highly recommended monoclonal alternatives to γ Tubulin (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see γ Tubulin (C-11): sc-17787.