SANTA CRUZ BIOTECHNOLOGY, INC.

δ Tubulin (3183C3a): sc-81416

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. There are five β Tubulin isoforms (β1, β2, β3, β4a and β4b) that are expressed in mammalian tissues. β1 and β4 are present throughout the cytosol, β2 is present in the nuclei and nucleoplasm and β3 is a neuron-specific cytoskeletal protein. γ Tubulin forms the gammasome, 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 homologue 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.

REFERENCES

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4. Leask, A. and Stearns, T. 1998. Expression of amino- and carboxyl-terminal γ and α Tubulin mutants in cultured epithelial cells. J. Biol. Chem. 273: 2661-2668.
5. Luduena, R.F. 1998. Multiple forms of Tubulin: different gene products and covalent modifications. Int. Rev. Cytol. 178: 207-275.
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7. Modig, C., Olsson, P.E., Barasoain, I., de Ines, C., Andreu, J.M., Roach, M.C., Luduena, R.F. and Wallin, M. 1999. Identification of β3 and β4 Tubulin isotypes in cold-adapted microtubules from Atlantic cod (*Gadus morhua*): antibody mapping and cDNA sequencing. Cell Motil. Cytoskeleton 42: 315-330.
8. Woulfe, J. and Munoz, D. 2000. Tubulin immunoreactive neuronal intranuclear inclusions in the human brain. Neuropathol. Appl. Neurobiol. 26: 161-171.
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CHROMOSOMAL LOCATION

Genetic locus: TUBD1 (human) mapping to 17q23.1.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

SOURCE

δ Tubulin (3183C3a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the N-terminus of TRAX of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

APPLICATIONS

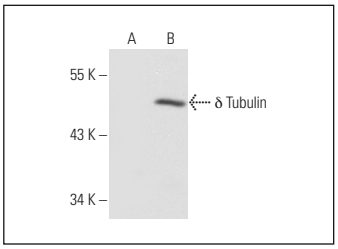
δ Tubulin (3183C3a) is recommended for detection of δ Tubulin of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for δ Tubulin siRNA (h): sc-35157, δ Tubulin shRNA Plasmid (h): sc-35157-SH and δ Tubulin shRNA (h) Lentiviral Particles: sc-35157-V.

Molecular Weight of δ Tubulin: 51 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

DATA



δ Tubulin (3183C3a): sc-81416. Western blot analysis of δ Tubulin expression in non-transfected: sc-117752 (**A**) and mouse δ Tubulin transfected: sc-126164 (**B**) 293T

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

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