

β Tubulin (N-20): sc-9935

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 ($\beta 1$, $\beta 2$, $\beta 3$, $\beta 4$, $\beta 5$, $\beta 6$ and $\beta 8$) have been characterized and are expressed in mammalian tissues. $\beta 1$ and $\beta 4$ are present throughout the cytosol, $\beta 2$ is present in the nuclei and nucleoplasm, and $\beta 3$ 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 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.

SOURCE

β Tubulin (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of β 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-9935 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

β Tubulin (N-20) is recommended for detection of β Tubulin, $\beta 2A$ Tubulin, $\beta 2B$ Tubulin, $\beta 2C$ Tubulin, $\beta 3$ Tubulin, $\beta 4$ Tubulin, $\beta 4Q$ Tubulin, $\beta 6$ Tubulin and $\beta 8$ Tubulin 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), 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).

β Tubulin (N-20) is also recommended for detection of β Tubulin, $\beta 2A$ Tubulin, $\beta 2B$ Tubulin, $\beta 2C$ Tubulin, $\beta 3$ Tubulin, $\beta 4$ Tubulin, $\beta 4Q$ Tubulin, $\beta 6$ Tubulin and $\beta 8$ Tubulin in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of β Tubulin: 55 kDa.

STORAGE

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

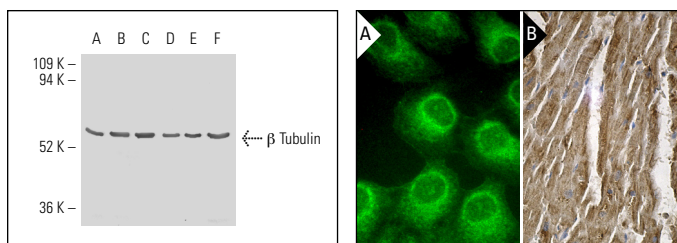
PROTOCOLS

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

RESEARCH USE

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

DATA



β Tubulin (N-20): sc-9935. Western blot analysis of β Tubulin expression in HeLa (A), A-431 (B), KNRK (C), BJAB (D), NIH/3T3 (E) and K-562 (F) whole cell lysates.

β Tubulin (N-20): sc-9935. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes (B).

SELECT PRODUCT CITATIONS

- Tong, X., et al. 2007. Apigenin prevents UVB-induced cyclooxygenase 2 expression: coupled mRNA stabilization and translational inhibition. *Mol. Cell. Biol.* 27: 283-296.
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- Cakici, C., et al. 2013. Recovery of fertility in azoospermia rats after injection of adipose-tissue-derived mesenchymal stem cells: the sperm generation. *Biomed Res. Int.* 2013: 529589.
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Try **β Tubulin (D-10): sc-5274** or **β Tubulin (G-8): sc-55529**, our highly recommended monoclonal alternatives to β Tubulin (N-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **β Tubulin (D-10): sc-5274**.