α3 Tubulin (B-21): sc-130929



The Power to Question

BACKGROUND

Tubulin is a major cytoskeleton component that has five distinct forms, designated $\alpha,\,\beta,\,\gamma,\,\delta$ and ϵ Tubulin. α and β Tubulins form heterodimers which multimerize to form a microtubule filament. Multiple β Tubulin isoforms ($\beta1,\,\beta2,\,\beta3,\,\beta4,\,\beta5,\,\beta6$ and $\beta8)$ have been characterized and are expressed in mammalian tissues. $\beta1$ and $\beta4$ are present throughout the cytosol, $\beta2$ is present in the nuclei and nucleoplasm, and $\beta3$ 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.

REFERENCES

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SOURCE

 α 3 Tubulin (B-21) is an affinity purified rabbit polyclonal antibody raised against synthetic α 3C Tubulin peptide of human origin.

PRODUCT

Each vial contains 50 μg IgG in 500 μl PBS with <0.1% sodium azide, 0.1% gelatin and <0.02% sucrose.

APPLICATIONS

 $\alpha 3$ Tubulin (B-21) is recommended for detection of $\alpha 3$ Tubulin and $\alpha 1$ Tubulin of mouse, rat, human, *Drosophila melanogaster* and *Caenorhabditis elegans* 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of $\alpha 3$ Tubulin isoform 1: 50 kDa.

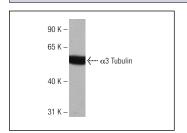
Molecular Weight of α3 Tubulin isoform 2: 46 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or Jurkat whole cell lysate: sc-2204.

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).

DATA



 $\alpha 3$ Tubulin (B-21): sc-130929. Western blot analysis of $\alpha 3$ Tubulin expression in Hep G2 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.

RESEARCH USE

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

PROTOCOLS

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



Try $\alpha 3$ Tubulin (10J1): sc-134240, our highly recommended monoclonal alternative to $\alpha 3$ Tubulin (B-21).