

ε Tubulin (N-15): sc-10470

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 (β -I, β -II, β -III, β -IVa and β -IVb) that are expressed in mammalian tissues. β -I and β -IV are present throughout the cytosol, β -II is present in the nuclei and nucleoplasm, and β -III is a neuron-specific cytoskeletal protein. γ tubulin forms the gammaosome, 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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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: TUBE1 (human) mapping to 6q21.

SOURCE

ϵ Tubulin (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ϵ Tubulin 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.

Blocking peptide available for competition studies, sc-10470 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ϵ Tubulin (N-15) is recommended for detection of ϵ Tubulin of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

ϵ Tubulin (N-15) is also recommended for detection of ϵ Tubulin in additional species, including bovine, porcine and avian.

Suitable for use as control antibody for ϵ Tubulin siRNA (h): sc-43486, ϵ Tubulin shRNA Plasmid (h): sc-43486-SH and ϵ Tubulin shRNA (h) Lentiviral Particles: sc-43486-V.

Molecular Weight of ϵ Tubulin: 60 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.