**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 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**


**SOURCE**

α Tubulin (TU-02) is a mouse monoclonal antibody raised against amino acids 1-451 representing full length α Tubulin of porcine origin.

**PRODUCT**

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

α Tubulin (TU-02) is available conjugated to either TRITC (sc-8035 TRITC, 200 µg/ml), PerCP (sc-8035 PerCP), PerCP-Cy5.5 (sc-8035 PCPC5) or Alexa Fluor® 405 (sc-8035 AF405), 100 tests in 2 ml, for IF, IHC(P) and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

**APPLICATIONS**

α Tubulin (TU-02) is recommended for detection of α Tubulin of mouse, rat, human and porcine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of α Tubulin: 55 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, C2C12 whole cell lysate: sc-364188 or NAMALWA cell lysate: sc-2234.

**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.

**DATA**

α Tubulin (TU-02): sc-8035. Western blot analysis of α Tubulin expression in NIH/3T3 (A), C2C12 (B), NAMALWA (C), A-673 (D), PC-12 (E) and G6 (F) whole cell lysates.

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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