**BACKGROUND**

Tubulin is a major cytoskeleton component that has five distinct forms, designated \( \alpha, \beta, \gamma, \delta \) and \( \epsilon \). Tubulin \( \alpha \) and \( \beta \) Tubulins form heterodimers which multimerize to form a microtubule filament. Multiple \( \beta \) Tubulin isoforms \( (\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6 \text{ and } \beta_8) \) 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. \( \gamma \) Tubulin forms the gammaosome, which is required for nucleating microtubule filaments at the centrosome. Both \( \delta \) Tubulin and \( \epsilon \) Tubulin are associated with the centrosome. \( \delta \) Tubulin is a homolog of the *Chlamydomonas* \( \delta \) Tubulin Uni3 and is found in association with the centrioles, whereas \( \epsilon \) Tubulin localizes to the pericentriolar material. \( \epsilon \) 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.

**CHROMOSOMAL LOCATION**

Genetic locus: TUBG1/TUBG2 (human) mapping to 17q21.2; Tubb1/Tubb2 (mouse) mapping to 11 D.

**SOURCE**

\( \gamma \) Tubulin (TU-30) is a mouse monoclonal antibody raised against the C-terminus of \( \gamma \) Tubulin of human origin.

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

\( \gamma \) Tubulin (TU-30) is recommended for detection of \( \gamma \) 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)) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for \( \gamma \) Tubulin siRNA (h): sc-2932, \( \gamma \) Tubulin shRNA (m): sc-29323, \( \gamma \) Tubulin shRNA Plasmid (h): sc-29322-SH, \( \gamma \) Tubulin shRNA Plasmid (m): sc-29323-SH, \( \gamma \) Tubulin shRNA (h) Lentiviral Particles: sc-29322-V and \( \gamma \) Tubulin shRNA (m) Lentiviral Particles: sc-29323-V.

Molecular Weight of \( \gamma \) Tubulin: 50 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, A-431 whole cell lysate: sc-2201 or KNRK whole cell lysate: sc-2214.

**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 website at www.scbt.com for detailed protocols and support products.