**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 (β1, β2, β3, β4, β5, β6 and β8) have been characterized and 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**

β Tubulin (TUB 2.1) is a mouse monoclonal antibody raised against purified brain β Tubulin of rat origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. β Tubulin (TUB 2.1) is available conjugated to agarose (sc-58886 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-58886 HRP), 200 µg/ml, for WB, IHC (IF) and ELISA; to either phycoerythrin (sc-58886 PE), fluorescein isothiocyanate (sc-58886 FITC), Alexa Fluor® 546 (sc-58886 AF546), Alexa Fluor® 594 (sc-58886 AF594) or Alexa Fluor® 647 (sc-58886 AF647), 200 µg/ml, for WB (RGB), IF, IHC (IF) and FCM; and to either phycoerythrin (sc-58886 PE), fluorescein isothiocyanate (sc-58886 FITC), Alexa Fluor® 546 (sc-58886 AF546), Alexa Fluor® 594 (sc-58886 AF594) or Alexa Fluor® 647 (sc-58886 AF647), 200 µg/ml, for WB (RGB), IF, IHC (IF) and FCM; and to either phycoerythrin (sc-58886 PE), fluorescein isothiocyanate (sc-58886 FITC), Alexa Fluor® 546 (sc-58886 AF546), Alexa Fluor® 594 (sc-58886 AF594) or Alexa Fluor® 647 (sc-58886 AF647), 200 µg/ml, for WB (RGB), IF, IHC (IF) and FCM; and to either phycoerythrin (sc-58886 PE), fluorescein isothiocyanate (sc-58886 FITC), Alexa Fluor® 546 (sc-58886 AF546), Alexa Fluor® 594 (sc-58886 AF594) or Alexa Fluor® 647 (sc-58886 AF647), 200 µg/ml, for WB (RGB), IF, IHC (IF) and FCM; and to either phycoerythrin (sc-58886 PE), fluorescein isothiocyanate (sc-58886 FITC), Alexa Fluor® 546 (sc-58886 AF546), Alexa Fluor® 594 (sc-58886 AF594) or Alexa Fluor® 647 (sc-58886 AF647), 200 µg/ml, for WB (RGB), IF, IHC (IF) and FCM; and to either phycoerythrin (sc-58886 PE), fluorescein isothiocyanate (sc-58886 FITC), Alexa Fluor® 546 (sc-58886 AF546), Alexa Fluor® 594 (sc-58886 AF594) or Alexa Fluor® 647 (sc-58886 AF647), 200 µg/ml, for WB (RGB), IF, IHC (IF) and FCM.

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**APPLICATIONS**

β Tubulin (TUB 2.1) is recommended for detection of β Tubulin of mouse, rat, human and bovine 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of β Tubulin: 55 kDa.

Positive Controls: Raji whole cell lysate: sc-364236, PC-12 cell lysate: sc-2250 or BJAB whole cell lysate: sc-2207.

**STORAGE**

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

**DATA**

β Tubulin expression in BJAB (A), PC-12 (B), Raji (C) and HeLa (D) whole cell lysates. Blocking with UltraCruz® Blocking Reagent: sc-616214. Cruz Marker™ Molecular Weight Standards detected with Cruz Marker MW Tag-Alexa Fluor® 647: sc-516791.

β Tubulin (TUB 2.1): sc-58886. Direct fluorescent western blot analysis of β Tubulin expression in BJAB (A), PC-12 (B), Raji (C) and HeLa (D) whole cell lysates.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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