β Tubulin (2-28-33): sc-23949



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.

SOURCE

 β Tubulin (2-28-33) is a mouse monoclonal antibody raised against Sarkosyl-resistant ribbons from *Strongylocentrotus purpuratus* (sea urchin) sperm axonemes.

PRODUCT

Each vial contains 200 $\mu g \ lgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

 β Tubulin (2-28-33) is available conjugated to agarose (sc-23949 AC), 500 $\mu g/0.25$ ml agarose in 1 ml, for IP; to HRP (sc-23949 HRP), 200 $\mu g/ml$, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-23949 PE), fluorescein (sc-23949 FITC), Alexa Fluor® 488 (sc-23949 AF488), Alexa Fluor® 546 (sc-23949 AF546), Alexa Fluor® 594 (sc-23949 AF594) or Alexa Fluor® 647 (sc-23949 AF647), 200 $\mu g/ml$, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-23949 AF680) or Alexa Fluor® 790 (sc-23949 AF790), 200 $\mu g/ml$, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

 β Tubulin (2-28-33) is recommended for detection of β Tubulin of mammalian species, zebrafish, *Drosophila* and *Xenopus* 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: KNRK whole cell lysate: sc-2214, MDA-MB-231 cell lysate: sc-2232 or MCF7 whole cell lysate: sc-2206.

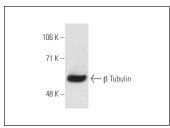
STORAGE

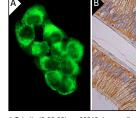
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

DATA





 β Tubulin (2-28-33): sc-23949. Western blot analysis of β Tubulin expression in KNRK whole cell lysate.

 β Tubulin (2-28-33): sc-23949. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human epididymis tissue showing cytoplasmic and membrane staining of glandular cells (B).

SELECT PRODUCT CITATIONS

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PROTOCOLS

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