

acetylated α Tubulin (6-11B-1): sc-23950

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 ($\beta 1$, $\beta 2$, $\beta 3$, $\beta 4$, $\beta 5$, $\beta 6$ 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. 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

acetylated α Tubulin (6-11B-1) is a mouse monoclonal antibody raised against the outer arms of *Strongylocentrotus purpuratus* (sea urchin) sperm axonemes.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

acetylated α Tubulin (6-11B-1) is available conjugated to agarose (sc-23950 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-23950 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-23950 PE), fluorescein (sc-23950 FITC), Alexa Fluor[®] 488 (sc-23950 AF488), Alexa Fluor[®] 546 (sc-23950 AF546), Alexa Fluor[®] 594 (sc-23950 AF594) or Alexa Fluor[®] 647 (sc-23950 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-23950 AF680) or Alexa Fluor[®] 790 (sc-23950 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

acetylated α Tubulin (6-11B-1) is recommended for detection of acetylated α 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 μ g per 100-500 μ g 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); non cross-reactive with non-acetylated α Tubulin or other lysine acetylation sites.

Molecular Weight of acetylated α Tubulin: 55 kDa.

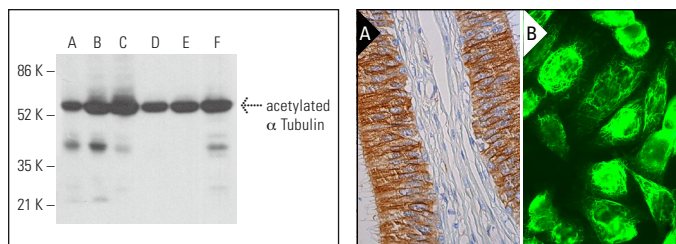
Positive Controls: A2058 whole cell lysate: sc-364178, 3T3-L1 cell lysate: sc-2243 or Jurkat whole cell lysate: sc-2204.

Santa Cruz Biotechnology offers several chemical inducers of acetylation, including: Apicidin (sc-202061), Panobinostat (sc-208148), Suberoylanilide Hydroxamic Acid (sc-220139), Oxamflatin (sc-205960), Ms-275 (sc-279455), M 344 (sc-203124), Scriptaid (sc-202807), Trapoxin A (sc-253730) and Trichostatin A (sc-3511).

STORAGE

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

DATA



acetylated α Tubulin (6-11B-1): sc-23950. Western blot analysis of acetylated α Tubulin expression in 3T3-L1 (A), A2058 (B), SJRH30 (C), Jurkat (D), BC₃H1 (E) and Sol8 (F) whole cell lysates.

acetylated α Tubulin (6-11B-1): sc-23950. Immunoperoxidase staining of formalin fixed, paraffin-embedded human epididymis tissue showing cytoplasmic and membrane staining of glandular cells (A), acetylated α Tubulin (6-11B-1) Alexa Fluor[®] 488: sc-23950 AF488. Direct immunofluorescence staining of formalin-fixed SW480 cells showing cytoskeletal localization. Blocked with UltraCruz[®] Blocking Reagent: sc-516214 (B).

SELECT PRODUCT CITATIONS

- Tavera-Mendoza, L.E., et al. 2008. Incorporation of histone deacetylase inhibition into the structure of a nuclear receptor agonist. *Proc. Natl. Acad. Sci. USA* 105: 8250-8255.
- Wu, C.T., et al. 2023. SARS-CoV-2 replication in airway epithelia requires motile cilia and microvillar reprogramming. *Cell* 186: 112-130.e20.
- Dama, D. and Sharma, S.K. 2024. Crebinostat facilitates memory formation. *Biochem. Biophys. Res. Commun.* 710: 149872.
- Vaitinadapoulé, H., et al. 2024. Expression of Yes-associated protein in endothelial cells of human corneas before and after storage in organ culture. *Sci. Rep.* 14: 31073.
- Ogneva, I.V., et al. 2024. The motility of mouse spermatozoa changes differentially after 30-minute exposure under simulating weightlessness and hypergravity. *Int. J. Mol. Sci.* 25: 13561.
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- Lam, V.H.K., et al. 2025. Protocol for generating and characterizing a nasal epithelial model using imaging with application for respiratory viruses. *STAR Protoc.* 6: 103520.
- Quelhas, P., et al. 2025. Structural disruption of cilia and increased cytoplasmic tubulin in Biliary Atresia-an exploratory study focusing on early postoperative prognosis following portoenterostomy. *Biomedicines* 13: 87.
- Harima, R., et al. 2025. TCTEX1D2 is essential for sperm flagellum formation in mice. *Sci. Rep.* 15: 2413.

RESEARCH USE

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