

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 (β 1, β 2, β 3, β 4, β 5, β 6 and β 8) have been characterized and are expressed in mammalian tissues. β 1 and β 4 are present throughout the cytosol, β 2 is present in the nuclei and nucleoplasm, and β 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.

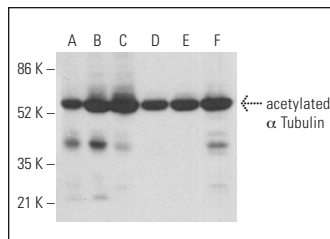
Positive Controls: A2058 whole cell lysate: sc-364178, 3T3-L1 cell lysate: sc-2243 or Jurkat whole cell lysate: sc-2204.

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).

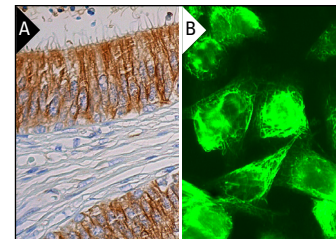
STORAGE

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.
- Tee, J.K., et al. 2019. Angiotensin-1 accelerates restoration of endothelial cell barrier integrity from nanoparticle-induced leakiness. *Nanotoxicology* 13: 682-700.
- Zhang, P., et al. 2019. Microscopy-based automated live cell screening for small molecules that affect ciliation. *Front. Genet.* 10: 75.
- Denu, R.A., et al. 2019. Polo-like kinase 4 maintains centriolar satellite integrity by phosphorylation of centrosomal protein 131 (CEP131). *J. Biol. Chem.* 294: 6531-6549.
- Schutgens, F., et al. 2019. Tubuloids derived from human adult kidney and urine for personalized disease modeling. *Nat. Biotechnol.* 37: 303-313.
- Kiseleva, A.A., et al. 2019. Unexpected activities in regulating ciliation contribute to off-target effects of targeted drugs. *Clin. Cancer Res.* 25: 4179-4193.
- Hsing, E.W., et al. 2019. TNF- α -induced miR-450a mediates TMEM182 expression to promote oral squamous cell carcinoma motility. *PLoS ONE* 14: e0213463.
- Saito, N., et al. 2019. Fgf- and Bmp-signaling regulate gill regeneration in *Ambystoma mexicanum*. *Dev. Biol.* 452: 104-113.
- Sachs, N., et al. 2019. Long-term expanding human airway organoids for disease modeling. *EMBO J.* 38: pii: e100300.

RESEARCH USE

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