

α Tubulin (A-6): sc-398103

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 gammaosome, 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

α Tubulin (A-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 22-49 N-terminus of α Tubulin of human origin.

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.

α Tubulin (A-6) is available conjugated to agarose (sc-398103 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398103 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398103 PE), fluorescein (sc-398103 FITC), Alexa Fluor[®] 488 (sc-398103 AF488), Alexa Fluor[®] 546 (sc-398103 AF546), Alexa Fluor[®] 594 (sc-398103 AF594) or Alexa Fluor[®] 647 (sc-398103 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-398103 AF680) or Alexa Fluor[®] 790 (sc-398103 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398103 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

α Tubulin (A-6) is recommended for detection of α Tubulin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

α Tubulin (A-6) is also recommended for detection of α Tubulin in additional species, including equine, canine, bovine, porcine and avian.

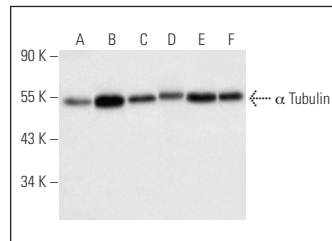
Suitable for use as control antibody for α Tubulin siRNA (h): sc-29188, α Tubulin siRNA (m): sc-29189, α Tubulin shRNA Plasmid (h): sc-29188-SH, α Tubulin shRNA Plasmid (m): sc-29189-SH, α Tubulin shRNA (h) Lentiviral Particles: sc-29188-V and α Tubulin shRNA (m) Lentiviral Particles: sc-29189-V.

Molecular Weight of α Tubulin: 55 kDa.

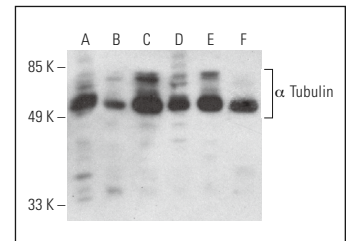
STORAGE

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

DATA



α Tubulin (A-6): sc-398103. Western blot analysis of α Tubulin expression in PC-12 (A), K-562 (B), MCF7 (C), A549 (D), BJAB (E) and HeLa (F) whole cell lysates.



α Tubulin (A-6) HRP: sc-398103 HRP. Direct western blot analysis of α Tubulin expression in C2C12 (A), HL-60 (B), Jurkat (C), NIH/3T3 (D), SH-SY5Y (E) and SW-13 (F) whole cell lysates.

SELECT PRODUCT CITATIONS

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- Muñoz, V.R., et al. 2020. Physical exercise increases ROCK activity in the skeletal muscle of middle-aged rats. *Mech. Ageing Dev.* 186: 111213.
- Briebesca-Cruz, I., et al. 2021. Maqui berry (*Aristotelia chilensis*) extract improves memory and decreases oxidative stress in male rat brain exposed to ozone. *Nutr. Neurosci.* 24: 477-489.
- Park, J., et al. 2022. ERK phosphorylation disrupts the intramolecular interaction of capicua to promote cytoplasmic translocation of capicua and tumor growth. *Front. Mol. Biosci.* 9: 1030725.

RESEARCH USE

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

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