# SANTA CRUZ BIOTECHNOLOGY, INC.

# Tubulin (5F131): sc-73242



BACKGROUND

Tubulin is a major cytoskeleton component that has five distinct forms, designated  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$  and  $\epsilon$  Tubulin.  $\alpha$  and  $\beta$  Tubulins form heterodimers which multimerize to form a microtubule filament. Multiple  $\beta$  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.  $\gamma$  Tubulin forms the gammasome, which is required for nucleating microtubule filaments at the centrosome. Both  $\delta$  Tubulin and  $\epsilon$  Tubulin are associated with the centrosome.  $\delta$  Tubulin is a homolog of the *Chlamydomonas*  $\delta$  Tubulin localizes to the pericentriolar material.  $\epsilon$  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

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- Luduena, R.F. 1998. Multiple forms of Tubulin: different gene products and covalent modifications. Int. Rev. Cytol. 178: 207-275.
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- Modig, C., et al. 1999. Identification of β3- and β4-Tubulin isotypes in cold-adapted microtubules from Atlantic cod (*Gadus morhua*): antibody mapping and cDNA sequencing. Cell Motil. Cytoskeleton 42: 315-330.
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## SOURCE

Tubulin (5F131) is a mouse monoclonal antibody raised against skeletal muscle cell preparation of chicken origin.

#### PRODUCT

Each vial contains 500  $\mu l$  culture supernatant containing IgM with < 0.1% sodium azide.

#### **RESEARCH USE**

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

#### APPLICATIONS

Tubulin (5F131) is recommended for detection of Tubulin of avian origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:10-1:200) and immunofluorescence (starting dilution to be determined by researcher, dilution range 1:10-1:200).

Molecular Weight of Tubulin: 55 kDa.

#### SELECT PRODUCT CITATIONS

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- 5. Ouchida, A.T., et al. 2018. Synergistic effect of a novel autophagy inhibitor and Quizartinib enhances cancer cell death. Cell Death Dis. 9: 138.
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#### **STORAGE**

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/ thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.