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# $\alpha$ 1c Tubulin (h5): 293 Lysate: sc-158211

## BACKGROUND

Tubulin exists as five distinct forms, designated  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$  and  $\epsilon$ , all of which function as critical components of the cytoskeleton, specifically forming heterodimers which multimerize to produce microtubule filaments.  $\alpha$ 1c Tubulin, also known as TUBA1C or TUBA6, is a 449 amino acid protein that exists as a dimer of  $\alpha$  and  $\beta$  chains and belongs to the Tubulin family of cytoskeletal proteins. Like other members of the Tubulin family,  $\alpha$ 1c Tubulin exists as a major component of microtubules and functions to bind two moles of GTP, one at a non-exchangeable site on its  $\alpha$  chain and one at an exchangeable site on its  $\beta$  chain.  $\alpha$ 1c Tubulin is subject to a post-translational tyrosination/detyrosination cycle in which C-terminal tyrosine residues are added and removed by specific enzymes.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TUBA1C (human) mapping to 12q13.12.

## PRODUCT

$\alpha$ 1c Tubulin (h5): 293 Lysate represents a lysate of human  $\alpha$ 1c Tubulin transfected 293 cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## APPLICATIONS

$\alpha$ 1c Tubulin (h5): 293 Lysate is suitable as a Western Blotting positive control for human reactive  $\alpha$ 1c Tubulin antibodies. Recommended use: 10-20  $\mu$ l per lane.

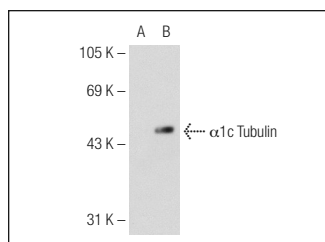
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

$\alpha$  Tubulin (6A204): sc-69969 is recommended as a positive control antibody for Western Blot analysis of enhanced human  $\alpha$ 1c Tubulin expression in  $\alpha$ 1c Tubulin transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



$\alpha$  Tubulin (6A204): sc-69969. Western blot analysis of  $\alpha$ 1c Tubulin expression in non-transfected: sc-110760 (A) and human  $\alpha$ 1c Tubulin transfected: sc-158211 (B) 293 whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.