

PRODUCT INFORMATION



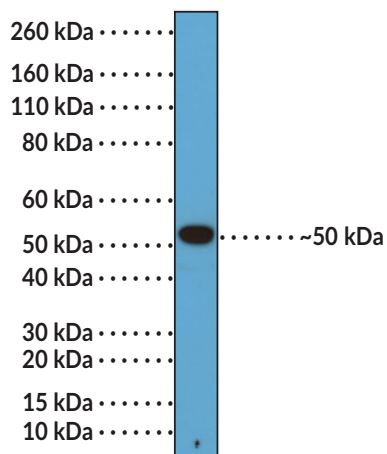
α -Tubulin Monoclonal Antibody (RM113)

Item No. 32126

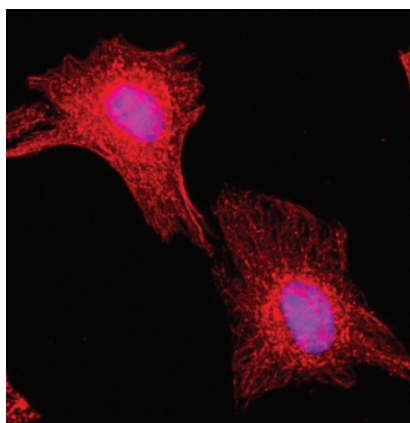
Overview and Properties

Contents:	This vial contains 100 μ l of protein A-affinity purified monoclonal antibody.
Synonyms:	α -Tubulin Chain
Immunogen:	Peptide from the C-terminal region of α -tubulin
Cross Reactivity:	(+) α -Tubulin 1A chain, α -Tubulin 1B chain
Species Reactivity:	Species independent
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	\geq 1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM113
Host:	Rabbit
Applications:	Immunocytochemistry (ICC) and Western blot (WB); the recommended starting dilution is 1:200 for ICC and 1:1,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



WB of A431 cells, using α -Tubulin Monoclonal Antibody (RM113) at 1:1,000 dilution, showed a band at the predicted MW (~50 kDa).



Immunocytochemical labeling of HeLa cells with α -Tubulin Monoclonal Antibody (RM113) at a 1:200 dilution (red). Nuclei have been labeled with DAPI (blue).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

α -Tubulin is a cytoskeletal protein and constituent of microtubules, a cytoskeletal assembly that has roles in a variety of cellular processes, including cell motility, division, differentiation, and intracellular transport.¹ α -Tubulin is highly conserved in eukaryotes and expressed in a cell- and isotype-specific manner.² There are eight human α -tubulin isotypes that consist of an N-terminal domain, which binds GTP and is required for microtubule self-assembly, and a variable C-terminal tail, which contains interaction sites for microtubule-associated proteins (MAPs) and is subject to a variety of post-translational modifications that regulate microtubule function and stability.^{1,3-5} Cayman's α -Tubulin Monoclonal Antibody (RM113) can be used for immunocytochemistry (ICC) and Western blot (WB) applications. The antibody recognizes α -tubulin at approximately 50 kDa.

References

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2. Binarová, P. and Tuszynski, J. Tubulin: Structure, functions and roles in disease. *Cells* **8**(10), 1294 (2019).
3. Vemu, A., Atherton, J., Spector, J.O., *et al.* Tubulin isoform composition tunes microtubule dynamics. *Mol. Biol. Cell* **28**(25), 3564-3572 (2017).
4. Valiron, O. New insights into microtubule elongation mechanisms. *Commun. Integr. Biol.* **4**(1), 10-13 (2011).
5. Zhang, F., Su, B., Wang, C., *et al.* Posttranslational modifications of α -tubulin in alzheimer disease. *Transl. Neurodegener.* **4**(9), (2015).

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