

alpha-Tubulin Antibody [2B11]

Catalog # ASC12043

Product Information

Application	WB, E
Other Accession	37492 , CAA25855 , 7846
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish
Host	Mouse
Clonality	Monoclonal
Isotype	IgG
Application Notes	alpha-Tubulin antibody can be used for detection of alpha-Tubulin by Western blot at 1 - 2 μ g/ml.

Additional Information

Other Names	Tubulin alpha-1A, TUBA1A, TUBA3, LIS3
Precautions	alpha-Tubulin Antibody [2B11] is for research use only and not for use in diagnostic or therapeutic procedures.

Background

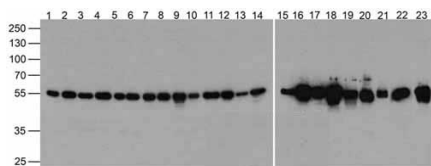
Alpha-Tubulin belongs to the tubulin superfamily, which is composed of six distinct families. Along with beta-tubulins, alpha-Tubulins are the major components of microtubules. These microtubules are involved in a wide variety of cellular activities ranging from mitosis and transport events to cell movement and the maintenance of cell shape. Alpha- and beta-tubulin dimers are assembled to 13 protofilaments that form a microtubule of 22-nm diameter (reviewed in 1). Tyrosine ligase adds a C-terminal tyrosine to monomeric alpha-Tubulin. Assembled microtubules can again be detyrosinated by a cytoskeleton-associated carboxypeptidase (2). Another post-translational modification of detyrosinated alpha-Tubulin is C-terminal polyglutamylation, which is characteristic of microtubules in neuronal cells and the mitotic spindle (3). Like GAPDH and β -Actin, this antibody makes an excellent loading control in immunoblots.

References

McKean PG, Vaughan S, and Gull K. The extended tubulin family. *J. Cell Sci.* 2001; 114:2723-33.; Barra HA, Arce CA, and Argarana CE. Posttranslational tyrosination/detyrosination of tubulin. *Mol. Neurobiol.* 1988; 2:133-53.; Fukushima N, Furuta D, Hidaka Y, et al. Post-translational modifications of tubulin in the nervous system. *J. Neurochem.* 2009; 109:683-693.;

Images

Western blot of alpha-Tubulin in 293, A431, A549, Daudi, HeLa, HepG2, Jurkat, K562, MOLT4, 3T3, Raji, Ramos, THP-1, U937, human brain, mouse brain, rat brain, rabbit brain, mouse lung, rat lung, mouse liver, rabbit spleen



and zebrafish lysate at 1 $\mu\text{g/mL}$.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.