

Alpha-tubulin Antibody (biotin)
Catalog # ASC12066**Specification**

Alpha-tubulin Antibody (biotin) - Product Information

Application	WB
Primary Accession	Q71U36
Other Accession	37492 , CAA25855 , 7846
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	50136
Application Notes	Biotin-Alpha-tubulin antibody can be used for detection of alpha-tubulin by Western blot at 1 - 2 µg/ml.

Alpha-tubulin Antibody (biotin) - Additional InformationGene ID **7846****Other Names**

Tubulin alpha-1A, TUBA1A, TUBA3, LIS3

Precautions

Alpha-tubulin Antibody (biotin) is for research use only and not for use in diagnostic or therapeutic procedures.

Alpha-tubulin Antibody (biotin) - Protein Information**Name** TUBA1A**Synonyms** TUBA3**Function**

Tubulin is the major constituent of microtubules, a cylinder consisting of laterally associated linear protofilaments composed of alpha- and beta-tubulin heterodimers. Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms. Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin.

Cellular Location

Cytoplasm, cytoskeleton.

Tissue Location

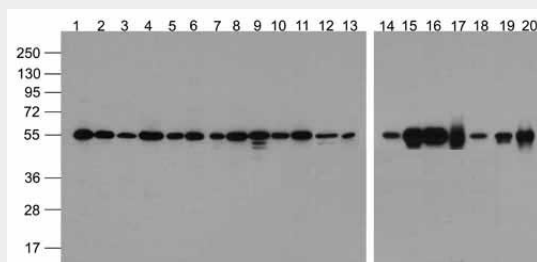
Expressed at a high level in fetal brain.

Alpha-tubulin Antibody (biotin) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Alpha-tubulin Antibody (biotin) - Images



Western blot analysis of Alpha-tubulin in multiple cell and tissue lysates with Biotin-Alpha-tubulin antibody at 1 µg/ml. Lanes 1-20: 293, A431, A549, Daudi, HeLa, HepG2, Jurkat, K562, MOLT, 3T3, Raji, THP-1, U937, human brain, mouse brain, rat brain, rabbit brain, mouse lung, chicken small intestine, and zebrafish lysate, respectively.

Alpha-tubulin Antibody (biotin) - 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.

Alpha-tubulin Antibody (biotin) - 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.;