

beta III Tubulin Antibody Rabbit mAb Catalog # AP90024

Specification

beta III Tubulin Antibody - Product Information

ApplicationWB, IHC, FC, ICC, IPPrimary AccessionQ13509ReactivityRatClonalityMonoclonalOther NamesDeta-4; tubulin beta-4; Tubulin beta-4 chain; Tubulin beta-III; CFEOM3A; MC1R; TBB3; TUBB3;TUBB4; Tubulin beta-3 chain; tubulin, beta 3; tubulin, beta, 4, beta tubulin

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	50433 Da

beta III Tubulin Antibody - Additional Information

Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human beta III Tubulin
Description	TUBB3 Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site on the beta chain and one at a non-exchangeable site on the alpha-chain. TUBB3 plays a critical role in proper axon guidance and mantainance.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

beta III Tubulin Antibody - Protein Information

Name TUBB3

Synonyms TUBB4

Function

Tubulin is the major constituent of microtubules, a cylinder consisting of laterally associated linear protofilaments composed of alpha- and beta-tubulin heterodimers (PubMed:34996871). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms (PubMed:34996871). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms (PubMed:34996871). Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha- tubulin



(PubMed:34996871). TUBB3 plays a critical role in proper axon guidance and maintenance (PubMed:20074521). Binding of NTN1/Netrin-1 to its receptor UNC5C might cause dissociation of UNC5C from polymerized TUBB3 in microtubules and thereby lead to increased microtubule dynamics and axon repulsion (PubMed:28483977). Plays a role in dorsal root ganglion axon projection towards the spinal cord (PubMed:28483977).

Cellular Location

Cytoplasm, cytoskeleton. Cell projection, growth cone {ECO:0000250|UniProtKB:Q9ERD7}. Cell projection, lamellipodium {ECO:0000250|UniProtKB:Q9ERD7}. Cell projection, filopodium {ECO:0000250|UniProtKB:Q9ERD7}

Tissue Location

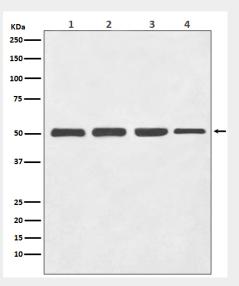
Expression is primarily restricted to central and peripheral nervous system. Greatly increased expression in most cancerous tissues.

beta III Tubulin Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

beta III Tubulin Antibody - Images



Western blot analysis of beta III Tubulin expression in (1) HeLa cell lysate; (2) PC-12 cell lysate; (3) Mouse brain lysate; (4) Rat brain lysate with beta Tubulin III Antibody.