

beta III Tubulin Antibody
Rabbit mAb
Catalog # AP90024

Specification

beta III Tubulin Antibody - Product Information

Application **WB, IHC, FC, ICC, IP**
Primary Accession [O13509](#)
Reactivity **Rat**
Clonality **Monoclonal**

Other Names

beta-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 **Affinity-chromatography**
Immunogen **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 maintenance.**
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](http://www.uniprot.org/citations/34996871)). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms (PubMed: [34996871](http://www.uniprot.org/citations/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

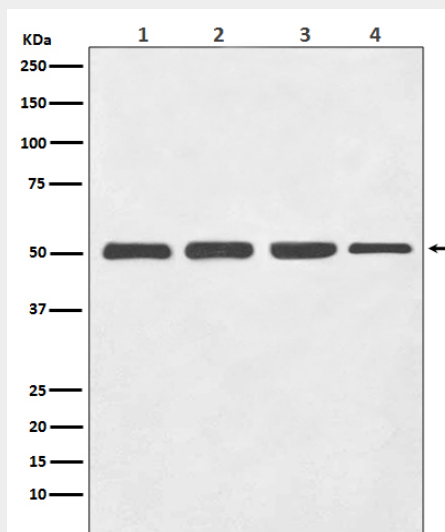
Expression is primarily restricted to central and peripheral nervous system. Greatly increased expression in most cancerous tissues.

beta III Tubulin Antibody - Protocols

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

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

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.