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beta III Tubulin Antibody
Rabbit mAb
Catalog # AP90022

Specification

beta III Tubulin Antibody - Product Information

Application	**WB, IHC, FC, ICC, IP**
Primary Accession	Q13509
Reactivity	**Rat, Human, Mouse**
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 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). 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}

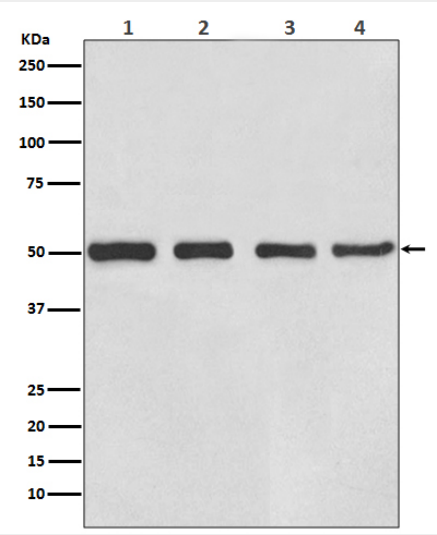
Tissue Location
Expression is primarily restricted to central and peripheral nervous system. Greatly increased expression in most cancerous tissues.

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 Cytomety
- 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 lysates with beta Tubulin III Antibody.