

**beta III Tubulin Antibody**  
**Rabbit mAb**  
**Catalog # AP90024****Specification****beta III Tubulin Antibody - Product Information**

Application	WB, IHC, FC, ICC, IP
Primary Accession	<a href="#">Q13509</a>
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**

Dilution	WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A IP~~N/A
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, protein filaments consisting of alpha- and

beta-tubulin heterodimers (PubMed:<a href="http://www.uniprot.org/citations/34996871" target="\_blank">34996871</a>, PubMed:<a href="http://www.uniprot.org/citations/38305685" target="\_blank">38305685</a>, PubMed:<a href="http://www.uniprot.org/citations/38609661" target="\_blank">38609661</a>). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms (PubMed:<a href="http://www.uniprot.org/citations/34996871" target="\_blank">34996871</a>, PubMed:<a href="http://www.uniprot.org/citations/38305685" target="\_blank">38305685</a>, PubMed:<a href="http://www.uniprot.org/citations/38609661" target="\_blank">38609661</a>). Below the cap, alpha-beta tubulin heterodimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin (PubMed:<a href="http://www.uniprot.org/citations/34996871" target="\_blank">34996871</a>, PubMed:<a href="http://www.uniprot.org/citations/38609661" target="\_blank">38609661</a>). TUBB3 plays a critical role in proper axon guidance and maintenance (PubMed:<a href="http://www.uniprot.org/citations/20074521" target="\_blank">20074521</a>). 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:<a href="http://www.uniprot.org/citations/28483977" target="\_blank">28483977</a>). Plays a role in dorsal root ganglion axon projection towards the spinal cord (PubMed:<a href="http://www.uniprot.org/citations/28483977" target="\_blank">28483977</a>).

#### **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.

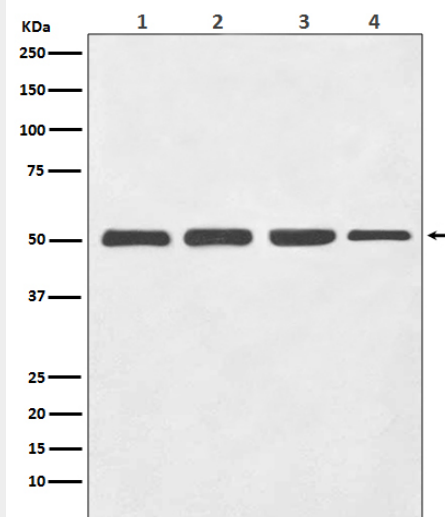
### **beta III Tubulin Antibody - Protocols**

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.