10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

beta III Tubulin Antibody

Rabbit mAb
Catalog # AP90024

Product Information

Application	WB, IHC, IF, FC, ICC, IP, IHF
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

Additional Information

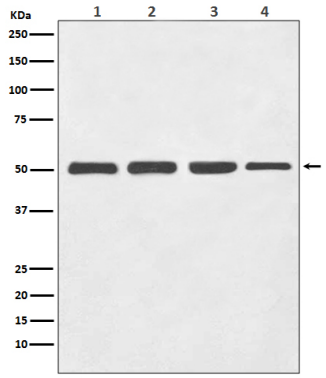
Dilution	WB 1:5000~1:10000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human beta III Tubulin
Description	TUBB3 Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site 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.

Protein Information

Name	TUBB3
Synonyms	TUBB4
Function	Tubulin is the major constituent of microtubules, protein filaments consisting of alpha- and beta-tubulin heterodimers (PubMed:34996871, PubMed:38305685, PubMed:38609661). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms (PubMed:34996871, PubMed:38305685, PubMed:38609661). Below the cap, alpha-beta tubulin heterodimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin (PubMed:34996871, PubMed:38609661). 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.

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.

Image not found : 202311/AP90024-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human thyroid cancer, using beta III Tubulin Antibody.

Image not found : 202311/AP90024-IF.jpg

Immunofluorescent analysis of A431 cells, using beta III Tubulin Antibody .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.