

beta III Tubulin Rabbit mAb

Catalog # AP75154

Product Information

Application WB, IHC-P, IHC-F, IP, ICC

Primary Accession <u>Q13509</u>

Reactivity Human, Mouse, Rat

Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 50433

Additional Information

Gene ID 10381

Other Names TUBB3

Dilution WB~~1/500-1/1000 IHC-P~~N/A IHC-F~~N/A IP~~1/20 ICC~~N/A

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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:<u>28483977</u>).

Cellular Location Cytoplasm, cytoskeleton. Cell projection, growth cone

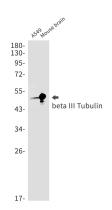
{ECO:0000250|UniProtKB:Q9ERD7}. Cell projection, lamellipodium

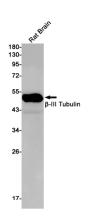
 $\label{lem:condition} $$ \{ ECO: 0000250 \mid UniProtKB: Q9ERD7 \}. Cell projection, filopodium \\ \{ ECO: 0000250 \mid UniProtKB: Q9ERD7 \}$

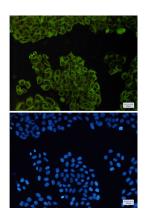
Tissue Location

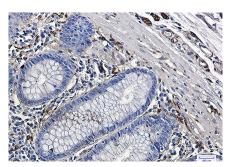
Expression is primarily restricted to central and peripheral nervous system. Greatly increased expression in most cancerous tissues.

Images









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