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Anti-Beta3-tubulin Antibody

Mouse monoclonal antibody to Beta3-tubulin
Catalog # AP61570

Product Information

Application	WB
Primary Accession	Q13509
Other Accession	Q9ERD7
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	50433

Additional Information

Gene ID	10381
Other Names	TUBB4; Tubulin beta-3 chain; Tubulin beta-4 chain; Tubulin beta-III
Target/Specificity	Recognizes endogenous levels of Beta3-tubulin protein.
Dilution	WB~~WB (1/2000 - 1/5000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

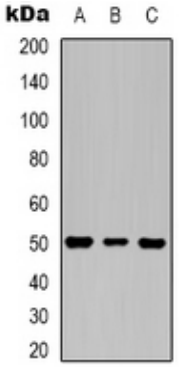
Name	TUBB3
Synonyms	TUBB4
Function	Tubulin is the major constituent of microtubules, protein filaments consisting of alpha- and beta-tubulin heterodimers (PubMed:34996871, PubMed:38305685, PubMed:38609661). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing 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.

Background

KLH-conjugated synthetic peptide encompassing a sequence of human Beta3-tubulin. The exact sequence is proprietary.

Images



Western blot analysis of Beta3-tubulin expression in Hela (A), mouse brain (B), rat brain (C) whole cell lysates.