Anti-TBB4A antibody

Description	Unconjugated Rabbit polyclonal to TBB4A

Model	STJ192957
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, WB
Gene ID	10382
Gene Symbol	TUBB4A
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	TBB4A Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Major isotype in brain, where it represents 46% of all beta-tubulins. In the brain, highest expression levels in the cerebellum, followed by putamen and white matter. Moderate levels in testis. Very low levels, if any, in other tissues.
Purification	TBB4A antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Tubulin beta-4A chain Tubulin 5 beta Tubulin beta-4 chain
Molecular Weight	48 kDa
Clonality	Polyclonal
Conjugation	Unconjugated

Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol,and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:20774OMIM:128101
Alternative Names	Tubulin beta-4A chain Tubulin 5 beta Tubulin beta-4 chain
Function	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.
Sequence and Domain Family	The highly acidic C-terminal region may bind cations such as calcium.
Cellular Localization	Cytoplasm, cytoskeleton.
Post-translational Modifications	Some glutamate residues at the C-terminus are polyglutamylated, resulting in polyglutamate chains on the gamma-carboxyl group . Polyglutamylation plays a key role in microtubule severing by spastin (SPAST). SPAST preferentially recognizes and acts on microtubules decorated with short polyglutamate tails: severing activity by SPAST increases as the number of glutamates per tubulin rises from one to eight, but decreases beyond this glutamylation threshold . Some glutamate residues at the C-terminus are monoglycylated but not polyglycylated due to the absence of functional TTLL10 in human. Monoglycylation is mainly limited to tubulin incorporated into axonemes (cilia and flagella). Both polyglutamylation and monoglycylation can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of monoglycylation is still unclear (Probable). Phosphorylated on Ser-172 by CDK1 during the cell cycle, from metaphase to telophase, but not in interphase. This phosphorylation inhibits tubulin incorporation into microtubules.