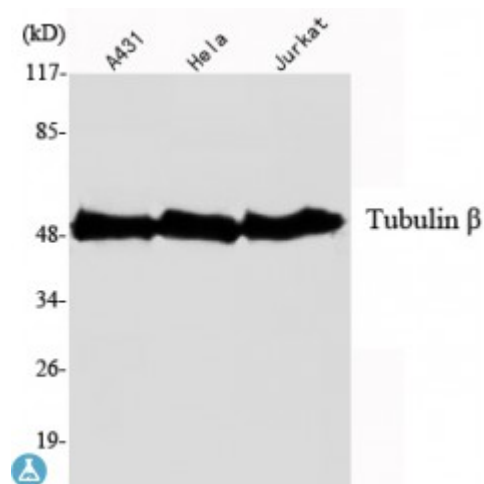


Anti-Tubulin beta antibody



Description	Mouse monoclonal to Tubulin beta.
Model	STJ98566
Host	Mouse
Reactivity	Bovine, Human, Mouse, Rabbit, Rat
Applications	WB
Immunogen	Purified recombinant human Tubulin beta protein fragments expressed in E.coli.
Gene ID	81027
Gene Symbol	TUBB1
Dilution range	WB 1:1000-1:2000
Specificity	Tubulin beta Monoclonal Antibody detects endogenous levels of Tubulin beta protein.
Tissue Specificity	Hematopoietic cell-specific. Major isotype in leukocytes, where it represents 50% of all beta-tubulins.
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Tubulin beta-1 chain
Clonality	Monoclonal
Conjugation	Unconjugated
Formulation	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4,

	150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:16257OMIM:612901
Alternative Names	Tubulin beta-1 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 .
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.