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ARG40573
anti-beta Tubulin antibody (FITC)

Package: 100 µl
Store at: 4°C

Summary

Product Description	FITC-conjugated Mouse Monoclonal antibody recognizes beta Tubulin
Tested Reactivity	Hu, Ms, Rat, Goat, Hm, Mk
Tested Application	ICC/IF, WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Target Name	beta Tubulin
Species	Human
Immunogen	Human beta Tubulin.
Conjugation	FITC
Alternate Names	OK/SW-cl.56; CDCBM6; Tubulin beta chain; M40; TUBB5; Tubulin beta-5 chain; TUBB1

Application Instructions

Application table

Application	Dilution
ICC/IF	1:100
WB	Assay-dependent

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

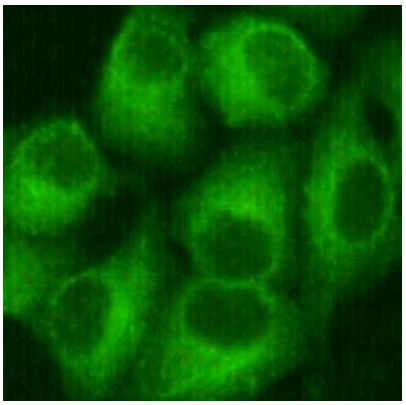
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 0.02% Sodium azide, 50% Glycerol and 1% BSA.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol and 1% BSA
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	TUBB
Gene Full Name	tubulin, beta class I
Background	This gene encodes a beta tubulin protein. This protein forms a dimer with alpha tubulin and acts as a structural component of microtubules. Mutations in this gene cause cortical dysplasia, complex, with other brain malformations 6. Alternative splicing results in multiple splice variants. There are multiple pseudogenes for this gene on chromosomes 1, 6, 7, 8, 9, and 13. [provided by RefSeq, Jun 2014]
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. [UniProt]
Research Area	Controls and Markers antibody; Signaling Transduction antibody; Loading Control antibody
Calculated Mw	50 kDa
PTM	Some glutamate residues at the C-terminus are polyglutamylated, resulting in polyglutamate chains on the gamma-carboxyl group (PubMed:26875866). 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 (PubMed:26875866). 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. [UniProt]
Cellular Localization	Cytoplasm, cytoskeleton. [UniProt]

Images



ARG40573 anti-beta Tubulin antibody (FITC) ICC/IF image

Immunofluorescence: HeLa cells fixed with 4% Paraformaldehyde and stained with ARG40573 anti-beta Tubulin antibody (FITC) at 1:100 dilution.