

ARG57104 anti-beta II Tubulin antibody [5B3]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [5B3] recognizes beta II Tubulin
Tested Reactivity	Hu, Ms
Tested Application	ICC/IF, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	5B3
Isotype	IgG2a, kappa
Target Name	beta II Tubulin
Species	Human
Immunogen	Recombinant fragment around aa. 1-445 of Human beta II Tubulin
Conjugation	Un-conjugated
Alternate Names	Tubulin beta-2B chain; bA506K6.1; PMGYSA

Application Instructions

Application table	Application	Dilution
	ICC/IF	Assay-dependent
	IHC-P	Assay - dependent
	WB	1:250 - 1:500
Application Note	IHC-P: Antigen Retrieval: Boil tissue section in 0.1M Sodium citrate buffer (pH 6.0) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

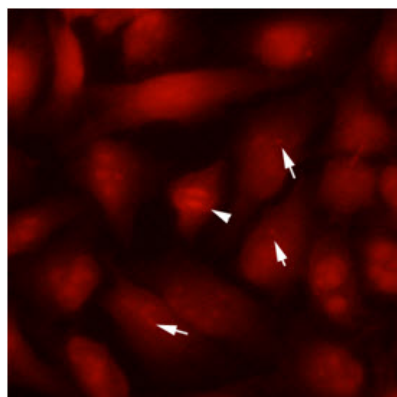
Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

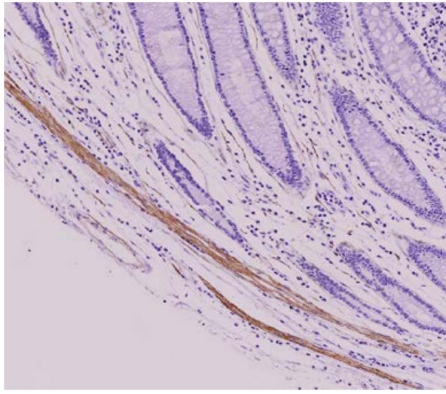
Database links	GeneID: 347733 Human GeneID: 73710 Mouse Swiss-port # Q9BVA1 Human Swiss-port # Q9CWF2 Mouse
Gene Symbol	TUBB2B
Gene Full Name	tubulin, beta 2B class IIb
Background	The protein encoded by this gene is a beta isoform of tubulin, which binds GTP and is a major component of microtubules. This gene is highly similar to TUBB2A and TUBB2C. Defects in this gene are a cause of asymmetric polymicrogyria. [provided by RefSeq, Mar 2010]
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 (By similarity). TUBB2B is implicated in neuronal migration. [UniProt]
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 TTL10 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.

Images



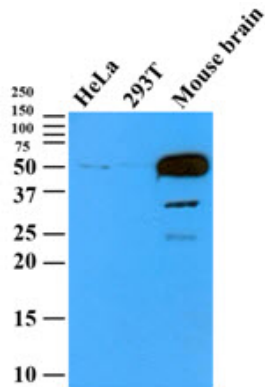
ARG57104 anti-beta II Tubulin antibody [5B3] ICC/IF image

Immunofluorescence: SW480 cells stained with ARG57104 anti-beta II Tubulin antibody [5B3] at 1:250 (Red). Arrow head: Mitotic cell, Arrow: MTOC (microtubule organizing center).



ARG57104 anti-beta II Tubulin antibody [5B3] IHC-P image

Immunohistochemistry: Paraffin-embedded sections of colorectal cancer tissue stained with ARG57104 anti-beta II Tubulin antibody [5B3] at 1:50 for 2 hours at RT. Antigen Retrieval: Boil tissue section in 0.1M Sodium citrate buffer (pH 6.0) for 20 min.



ARG57104 anti-beta II Tubulin antibody [5B3] WB image

Western blot: 35 µg of HeLa, 293T and Mouse brain lysates stained with ARG57104 anti-beta II Tubulin antibody [5B3] at 1:500.