

## ARG40578 anti-beta Tubulin antibody (HRP)

Package: 100 µl  
Store at: 4°C

### Summary

Product Description	HRP-conjugated Rabbit Polyclonal antibody recognizes beta Tubulin
Tested Reactivity	Hu, Ms, Rat
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	beta Tubulin
Species	Human
Immunogen	Synthetic peptide derived from Human beta Tubulin.
Conjugation	HRP
Alternate Names	CDCBM1; Tubulin beta-4 chain; Tubulin beta-3 chain; CFEOM3A; Tubulin beta-III; TUBB4; CDCBM; CFEOM3; FEOM3; beta-4

### Application Instructions

Application table	Application	Dilution
	WB	1:5000 - 1:20000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### Properties

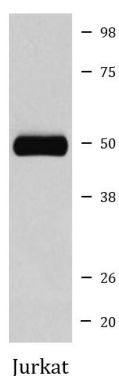
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw 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	TUBB3
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<b>Gene Full Name</b>	tubulin, beta 3 class III
<b>Background</b>	This gene encodes a class III member of the beta tubulin protein family. Beta tubulins are one of two core protein families (alpha and beta tubulins) that heterodimerize and assemble to form microtubules. This protein is primarily expressed in neurons and may be involved in neurogenesis and axon guidance and maintenance. Mutations in this gene are the cause of congenital fibrosis of the extraocular muscles type 3. Alternate splicing results in multiple transcript variants. A pseudogene of this gene is found on chromosome 6. [provided by RefSeq, Oct 2010]
<b>Function</b>	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. TUBB3 plays a critical role in proper axon guidance and maintenance. [UniProt]
<b>Research Area</b>	Controls and Markers antibody; Neuroscience antibody; Signaling Transduction antibody; Neuron Development Study antibody; Neuronal Cytoskeletal antibody; Neurite Marker antibody
<b>Calculated Mw</b>	50 kDa
<b>PTM</b>	<p>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).</p> <p>Some glutamate residues at the C-terminus are monoglycylated but not polyglycylated due to the absence of functional TLL10 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).</p> <p>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]</p>
<b>Cellular Localization</b>	Cytoplasm, cytoskeleton. [UniProt]

## Images



ARG40578 anti-beta Tubulin antibody (HRP) WB image

Western blot: Jurkat cell lysate stained with ARG40578 anti-beta Tubulin antibody (HRP).