

## ARG62654 anti-Tubulin antibody [DM1A + DM1B]

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [DM1A + DM1B] recognizes Tubulin
Tested Reactivity	Hu, Ms, Rat, Dm
Predict Reactivity	Bov, Chk, Gpig, Grb, Pig
Tested Application	EM, FACS, ICC/IF, IHC-P, IP, WB
Host	Mouse
Clonality	Monoclonal
Clone	DM1A + DM1B
Isotype	IgG1
Target Name	Tubulin
Species	Chicken
Immunogen	Native chicken (chick) brain microtubules.
Epitope	aa 426-450
Conjugation	Un-conjugated
Alternate Names	OK/SW-cl.56; CDCBM6; Tubulin beta chain; M40; TUBB5; Tubulin beta-5 chain; TUBB1

### Application Instructions

Application table	Application	Dilution
	EM	Assay-dependent
	FACS	Assay-dependent
	ICC/IF	Assay-dependent
	IHC-P	Assay-dependent
	IP	1:400
	WB	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Ls174T, MAD109 cells. Skin or lung.	

### Properties

Form	Liquid
Purification	Purified Antibody
Buffer	1X PBS and 0.1% Sodium azide

Preservative	0.1% Sodium azide
Concentration	0.2 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 or below. 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.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Database links	<a href="#">GeneID: 203068 Human</a> <a href="#">Swiss-port # P07437 Human</a>
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	<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 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).</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.</p>