

Rabbit Anti-TUBB5 antibody

SL12863R

Product Name:	TUBB5
Chinese Name:	
Alias:	beta 4 tubulin; Beta 5 tubulin; beta Ib tubulin; M40; tubulin beta 1 chain; Tubulin beta 4 chain; tubulin beta 5 chain; Tubulin beta; Tubulin beta chain; tubulin beta polypeptide; TBB5_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Zebrafish, Sheep, Xenopus laevis
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-
	500IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	55kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TUBB5:301-444/444
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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

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. Subunit: Dimer of alpha and beta chains. May interact with RNABP10. Interacts with PIFO. Interacts with MX1. Subcellular Location: Cytoplasmic, cytoskeleton. Tissue Specificity: Ubiquitously expressed with highest levels in spleen, thymus and immature brain. Post-translational modifications: Some glutamate residues at the C-terminus are polyglutamylated. This modification occurs exclusively on glutamate residues and results in polyglycylated due to the absence of functional TTLL10 in human. Monoglycylation is mainly limited to tubulin incorporated into axonemes (cilia and flagella) whereas glutamylation is prevalent in neuronal cells, centrioles, axonemes, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of such modifications can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of such modifications is still unclear but they regulate the assembly and dynamics of axonemal microtubules (Probable). Similarity: Belongs to the tubulin family. SWISS: P07437 Gene ID: 203068 Database links: Inter Gene: 22154Mouse Inter Gene: 2214Rat <tr< th=""><th>1, 6, 7, 8, 9, and 13. [provided by RefSeq, Jun 2014]</th></tr<>	1, 6, 7, 8, 9, and 13. [provided by RefSeq, Jun 2014]
Subunit: Dimer of alpha and beta chains. May interact with RNABP10. Interacts with PIFO. Interacts with MX1. Subcellular Location: Cytoplasmic, cytoskeleton. Tissue Specificity: Ubiquitously expressed with highest levels in spleen, thymus and immature brain. Post-translational modifications: Some glutamate residues at the C-terminus are polyglutanylated. This modification occurs exclusively on glutamate residues and results in polyglytate due to the absence of functional TTL1.10 in human. Monoglycylatori is mainly limited to tubulin incorporated into axonemes (cilia and flagella) whereas glutamylation is prevalent in neuronal cells, centrioles, axonemes, and the mitotic spindle. Both modifications can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of such modifications is still unclear but they regulate the assembly and dynamics of axonemal microtubules (Probable). Similarity: Belongs to the tubulin family. SWISS: PO7437 Gene ID: 203068 Database links: Intrez Gene: 20154Mouse Entrez Gene: 20214Rat Omim: 191130Human	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.
Subcellular Location: Cytoplasmic, cytoskeleton. Tissue Specificity: Ubiquitously expressed with highest levels in spleen, thymus and immature brain. Post-translational modifications: Some glutamate residues at the C-terminus are polyglutamylated. This modification occurs exclusively on glutamate residues and results in polyglutamate chains on the gamma-carboxyl group. Also 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) whereas glutamylation is prevalent in neuronal cells, centrioles, axonemes, and the mitoite spindle. Both modifications can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of such modifications is still unclear but they regulate the assembly and dynamics of axonemal microtubules (Probable). Similarity: Belongs to the tubulin family. SWISS: P07437 Gene ID: 203068 Database links: Entrez Gene: 203068Human Entrez Gene: 203048Human Entrez Gene: 20314Muse Entrez Gene: 22154Muse Entrez Gene: 2214Rat Omim: 191130Human Mitoria Supervisional Supervisio	Subunit: Dimer of alpha and beta chains. May interact with RNABP10. Interacts with PIFO. Interacts with MX1.
Tissue Specificity: Ubiquitously expressed with highest levels in spleen, thymus and immature brain. Post-translational modifications: Some glutamate residues at the C-terminus are polyglutamylated. This modification occurs exclusively on glutamate residues and results in polyglutamate chains on the gamma-carboxyl group. Also monoglycylated but not polyglycylated due to the absence of functional TTL110 in human. Monoglycylation is mainly limited to tubulin incorporated into axonemes (cilia and flagella) whereas glutamylation is prevalent in neuronal cells, centrioles, axonemes, and the mitotic spindle. Both modifications can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of such modifications is still unclear but they regulate the assembly and dynamics of axonemal microtubules (Probable). Similarity: Belongs to the tubulin family. SWISS: P07437 Gene ID: 203068 Database links: Entrez Gene: 22154Mouse Entrez Gene: 2214Rat Omim: 191130Human	Subcellular Location: Cytoplasmic, cytoskeleton.
Post-translational modifications: Some glutamate residues at the C-terminus are polyglutamylated. This modification occurs exclusively on glutamate residues and results in polyglutamate chains on the gamma-carboxyl group. Also monoglycylated but not polyglycylated due to the absence of functional TTLL10 in human. Monoglycylated but not polyglycylated to tubulin incorporated into axonemes (cilia and flagella) whereas glutamylation is prevalent in neuronal cells, centrioles, axonemes, and the mitotic spindle. Both modifications can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of such modifications is still unclear but they regulate the assembly and dynamics of axonemal microtubules (Probable). Similarity: Belongs to the tubulin family. SWISS: P07437 Gene ID: 203068 Database links: Entrez Gene: 203068Human Entrez Gene: 22154Mouse Entrez Gene: 2214Rat Omim: 191130Human Description	Tissue Specificity: Ubiquitously expressed with highest levels in spleen, thymus and immature brain.
Gene ID: 203068 Database links: Entrez Gene: 203068Human Entrez Gene: 22154Mouse Entrez Gene: 29214Rat Omim: 191130Human	Post-translational modifications: Some glutamate residues at the C-terminus are polyglutamylated. This modification occurs exclusively on glutamate residues and results in polyglutamate chains on the gamma-carboxyl group. Also 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) whereas glutamylation is prevalent in neuronal cells, centrioles, axonemes, and the mitotic spindle. Both modifications can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of such modifications is still unclear but they regulate the assembly and dynamics of axonemal microtubules (Probable). Similarity: Belongs to the tubulin family. SWISS: P07437
Database links: Entrez Gene: 203068Human Entrez Gene: 22154Mouse Entrez Gene: 29214Rat Omim: 191130Human	Gene ID: 203068
Entrez Gene: 203068Human Entrez Gene: 22154Mouse Entrez Gene: 29214Rat Omim: 191130Human	Database links:
Entrez Gene: 22154Mouse Entrez Gene: 29214Rat Omim: 191130Human	Entrez Gene: 203068Human
Entrez Gene: 29214Rat Omim: 191130Human	Entrez Gene: 22154 Mouse
<u>Omim: 191130</u> Human	Entrez Gene: 29214Rat
	<u>Omim: 191130</u> Human









Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TUBB5) Polyclonal Antibody, Unconjugated (SL12863R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.