

Rabbit Anti-Tubb3 antibody

SL2670R

Product Name:	Tubb3
Chinese Name:	微管蛋白β3抗体
Alias:	Tubulin beta 3; beta III Tubulin; Tubb3; Tubulin beta-3; beta 4; MC1R; TUBB 3; TUBB 4; TUBB3; TUBB4; Tubulin beta 3 chain; Tubulin beta 4; Tubulin beta III; Tubulin beta-3 chain; Neuron-specific class III beta-tubulin; Syntaxin III; Neuron specific beta III Tubulin; Tubulin beta-4 chain; Tubulin beta-III; beta-4; CDCBM; CFEOM3A; M(beta)3; M(beta)6; Neuron-specific class III beta-tubulin; QccE-11995; QccE-15186; TBB3 HUMAN; Tubulin beta 4; Tubulin beta-4 chain.
文献引用 PubMed :	<p>Specific References(2) SL2670R has been referenced in 2 publications.</p> <p>[IF=2.51]Li, Wen-Jing, et al. "Systematic expression analysis of genes related to multidrug-resistance in isogenic docetaxel-and adriamycin-resistant breast cancer cell lines." Molecular biology reports (2013): 1-8.WB;Human. PubMed:24078162</p> <p>[IF=2.41]Qu, Xinjian, et al. "Differentiation of reprogrammed human adipose mesenchymal stem cells toward neural cells with defined transcription factors." Biochemical and Biophysical Research Communications (2013).Human. PubMed:24036267</p>
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	50kDa
Cellular localization:	cytoplasmic

Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Tubb3:301-400/450
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:	<p>Neuronal Marker</p> <p>Beta III tubulin is abundant in the central and peripheral nervous systems (CNS and PNS) where it is prominently expressed during fetal and postnatal development. As exemplified in cerebellar and sympathoadrenal neurogenesis, the distribution of beta III is neuron-associated, exhibiting distinct temporospatial gradients according to the regional neuroepithelia of origin. However, transient expression of this protein is also present in the subventricular zones of the CNS comprising putative neuronal- and/or glial precursor cells, as well as in Kulchitsky neuroendocrine cells of the fetal respiratory epithelium. This temporally restricted, potentially non-neuronal expression may have implications in the identification of presumptive neurons derived from embryonic stem cells.</p> <p>Function: Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site on the betachain and one at a non-exchangeable site on the alpha chain. TUBB3 plays a critical role in proper axon guidance and maintenance.</p> <p>Subunit: Dimer of alpha and beta chains.</p> <p>Subcellular Location: Cytoplasm, cytoskeleton.</p> <p>Tissue Specificity: Expression is primarily restricted to central and peripheral nervous system. Greatly increased expression in most cancerous tissues.</p> <p>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 TLL10 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</p>

increases polyglutamylolation, and reciprocally. The precise function of such modifications is still unclear but they regulate the assembly and dynamics of axonemal microtubules (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.

DISEASE:

Defects in TUBB3 are the cause of congenital fibrosis of extraocular muscles type 3A (CFEOM3A) [MIM:600638]. A congenital ocular motility disorder marked by restrictive ophthalmoplegia affecting extraocular muscles innervated by the oculomotor and/or trochlear nerves. It is clinically characterized by anchoring of the eyes in downward gaze, ptosis, and backward tilt of the head. Congenital fibrosis of extraocular muscles type 3 presents as a non-progressive, autosomal dominant disorder with variable expression. Patients may be bilaterally or unilaterally affected, and their oculomotor defects range from complete ophthalmoplegia (with the eyes fixed in a hypo- and exotropic position), to mild asymptomatic restrictions of ocular movement. Ptosis, refractive error, amblyopia, and compensatory head positions are associated with the more severe forms of the disorder. In some cases the ocular phenotype is accompanied by additional features including developmental delay, corpus callosum agenesis, basal ganglia dysmorphism, facial weakness, polyneuropathy.

Defects in TUBB3 are the cause of cortical dysplasia complex with other brain malformations (CDCBM) [MIM:614039]. CDCBM is a disorder of aberrant neuronal migration and disturbed axonal guidance. Affected individuals have mild to severe mental retardation, strabismus, axial hypotonia, and spasticity. Brain imaging shows variable malformations of cortical development, including polymicrogyria, gyral disorganization, and fusion of the basal ganglia, as well as thin corpus callosum, hypoplastic brainstem, and dysplastic cerebellar vermis. Extraocular muscles are not involved.

Similarity:

Belongs to the tubulin family.

SWISS:

Q13509

Gene ID:

10381

Database links:

[Entrez Gene: 10381](#) Human

[Entrez Gene: 22152](#) Mouse

[Entrez Gene: 246118](#) Rat

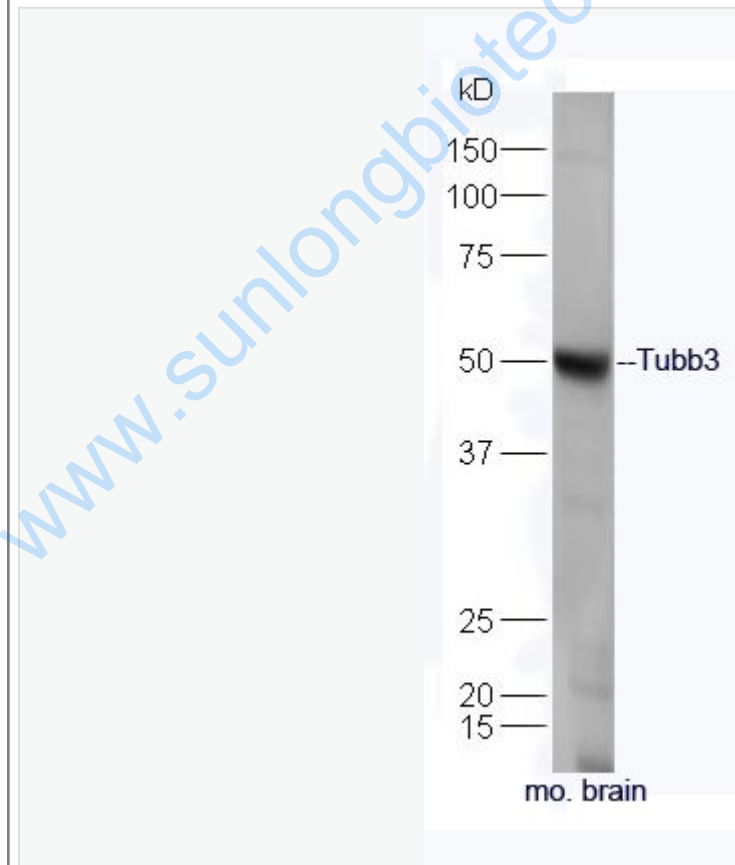
[Oimim: 602661](#)Human
[SwissProt: Q13509](#)Human
[SwissProt: Q9ERD7](#)Mouse
[SwissProt: Q4QRB4](#)Rat
[Unigene: 511743](#)Human
[Unigene: 40068](#)Mouse
[Unigene: 43958](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

神经细胞Maker/神经元Maker.

Picture:



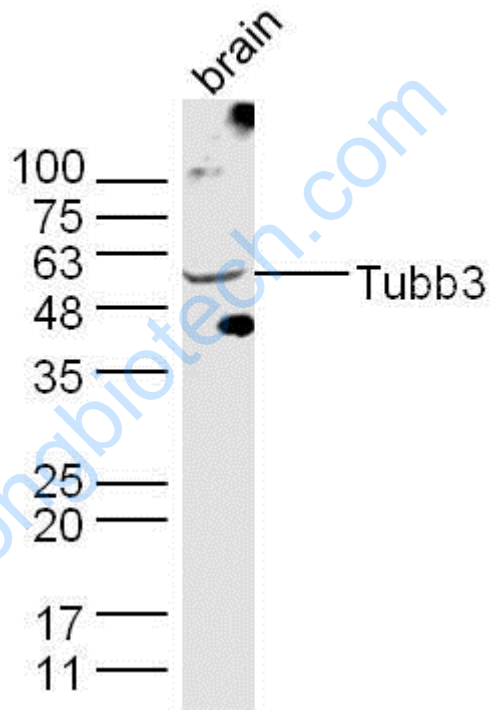
Sample: Brain(Mouse) lysate at 30ug;

Primary: Anti-Tubb3 (SL2670R) at 1:300 dilution;

Secondary: HRP conjugated Goat-Anti-rabbit IgG(SL2670R) at 1: 5000 dilution;

Predicted band size: 50 kD

Observed band size: 50 kD



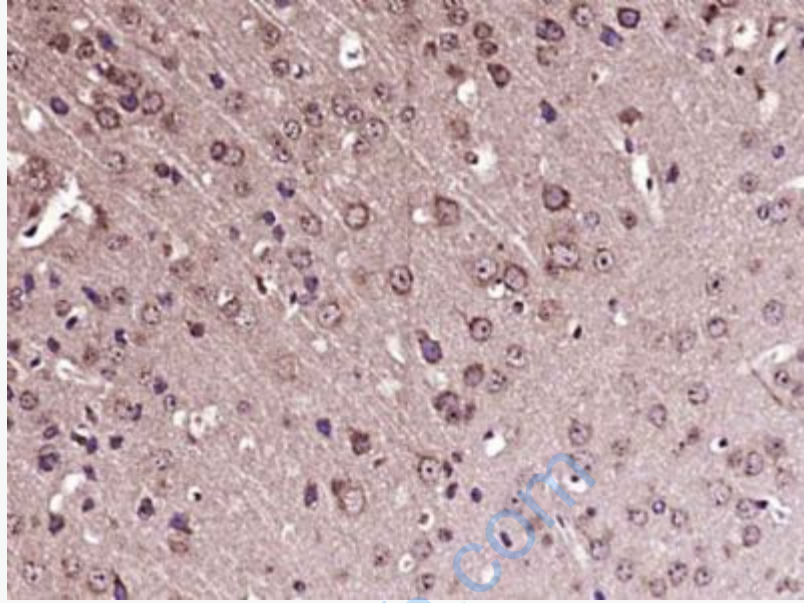
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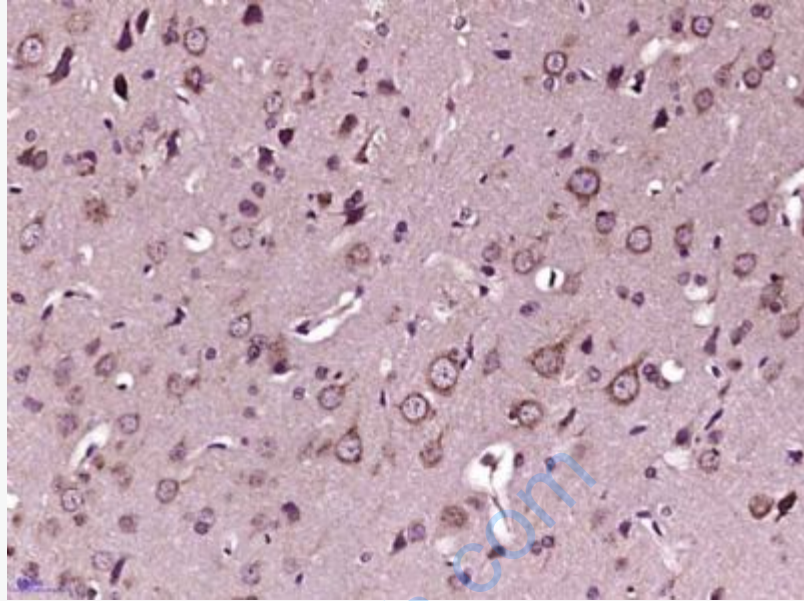
Secondary: HRP conjugated Goat-Anti-rabbit IgG(SL2670R) at 1: 5000 dilution;

Predicted band size: 50 kD

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Paraformaldehyde-fixed, paraffin embedded (Mouse 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 (Tubb3) Polyclonal Antibody, Unconjugated (SL2670R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



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 (Tubb3) Polyclonal Antibody, Unconjugated (SL2670R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.