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Rabbit Anti-phospho-TUBB3 (Ser172) antibody

SL20288R

Product Name:	phospho-TUBB3 (Ser172)
Chinese Name:	磷酸化神经细胞特异性微管蛋白抗体
Alias:	beta III Tubulin (phospho S172); p-beta III Tubulin (phospho S172); TUBB3(phospho S172); beta 4; MC1R; TBB3_HUMAN; TUBB 3; TUBB 4; TUBB3; TUBB4; Tubulin beta 3 chain; Tubulin beta 4; Tubulin beta III; Tubulin beta-3 chain; Tubulin beta-4 chain; Tubulin beta-III.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Rabbit,
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:	50-55kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human TUBB3 around the phosphorylation site of Ser172:VP(p-S)PK
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
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:	Tubulin is a major cytoskeleton component that has five distinct forms, designated a, b, g, d and e tubulin. a and b tubulins form heterodimers which multimerize to form a

	microtubule filament. Multiple b Tubulin isoforms (b1, b2, b3, b4, b5, b6 and b8) have been characterized and are expressed in mammalian tissues. b1 and b4 are present throughout the cytosol, b2 is present in the nuclei and nucleoplasm, and b3 is a neuron-specific cytoskeletal protein. g Tubulin forms the gammasome, which is required for nucleating microtubule filaments at the centrosome. Both d Tubulin and e Tubulin are associated with the centrosome. d Tubulin is a homolog of the Chlamydomonas d Tubulin Uni3 and is found in association with the centrioles, whereas e Tubulin localizes to the pericentriolar material. e Tubulin exhibits a cell cycle-specific pattern of localization; first associating with only the older of the centrosomes in a newly duplicated pair, and later associating with both centrosomes. **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. TUBB3 plays a critical role in proper axon guidance and mantainance. **Subunit:** Dimer of alpha and beta chains. **Subcellular Location:** Cytoplasm; cytoskeleton. **Tissue Specificity:** Expression is primarily restricted to central and peripheral nervous system. **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. **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 oculo-motility 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.

Similarity:
Belongs to the tubulin family.

SWISS:
Q13509

Gene ID:
10381

Database links:

Entrez Gene: 10381Human

Entrez Gene: 22152Mouse

Entrez Gene: 246118Rat

Omim: 602661Human

SwissProt: Q13509Human

SwissProt: Q9ERD7Mouse

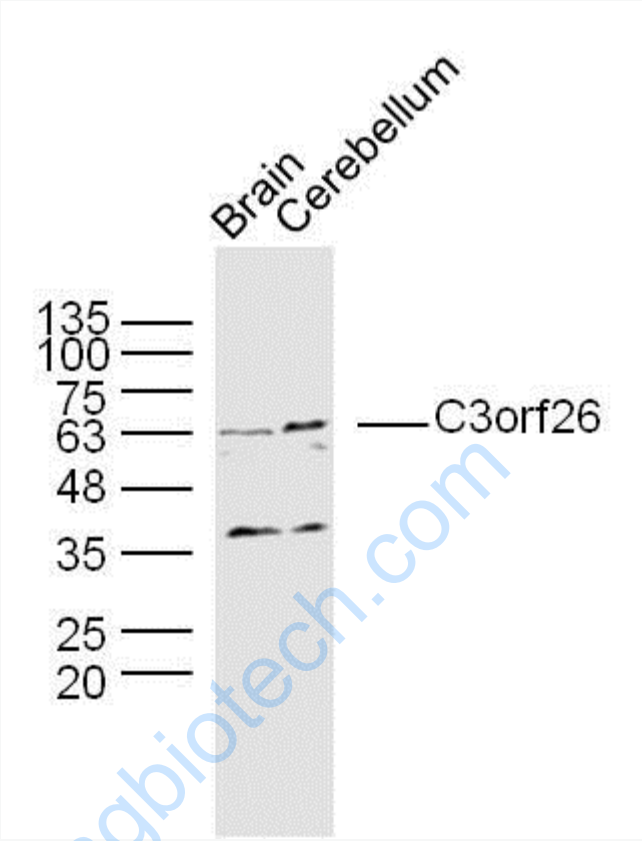
SwissProt: Q4QRB4Rat

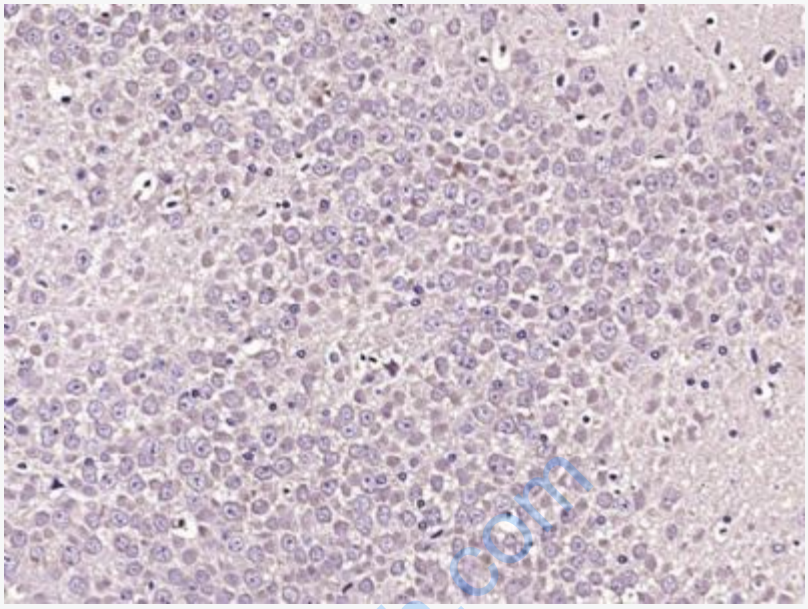
Unigene: 511743Human

Unigene: 40068Mouse

Unigene: 43958Rat

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

Picture:	 Sample: Brain (Mouse) Lysate at 40 ug Cerebellum (Mouse) Lysate at 40 ug Primary: Anti- p-TUBB3 (Ser172) (SL20288R)at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 50/55 kD Observed band size: 63 kD



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by microwave in sodium citrate buffer (pH6.0) ; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min; Antibody incubation with (phospho-TUBB3 (Ser172)) Polyclonal Antibody, Unconjugated (SL20288R) at 1:400 overnight at 4℃, followed by conjugation to the secondary antibody (labeled with HRP)and DAB staining.