



## Rabbit Anti-TUBB3 (Neuronal Marker) antibody

SL4512R

<b>Product Name:</b>	TUBB3 (Neuronal Marker)
<b>Chinese Name:</b>	神经细胞特异性微管蛋白抗体
<b>Alias:</b>	Neuron specific beta III Tubulin; 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; Beta tubulin III; Neuron specific beta III Tubulin.
<b>文献引用</b> PubMed :	<p><b>Specific References(2)</b> SL4512R has been referenced in 2 publications.</p> <p><b>[IF=4.46]</b>Song, Zhi-Qi, et al. "Overexpression of BAT3 Alleviates Prion Protein Fragment PrP106-126-Induced Neuronal Apoptosis." CNS Neuroscience &amp; Therapeutics (2014).<b>Human</b>.  <a href="#">PubMed:24629137</a></p> <p><b>[IF=1.26]</b>Bugue?o, Juan, et al. "Canine mesenchymal stem cell bone regenerative capacity is regulated by site-specific multi-lineage differentiation." Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology (2016).<b>IF;Dog</b>.  <a href="#">PubMed:0</a></p>
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Rabbit,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestICC=1:100-500IF=1:200-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	50-55kDa
<b>Cellular localization:</b>	cytoplasmic
<b>Form:</b>	Lyophilized or Liquid

<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Neuron specific beta III Tubulin:401-450/450
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>Neuronal Marker</p> <p>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.</p> <p><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.</p> <p><b>Subcellular Location:</b> Cytoplasm, cytoskeleton.</p> <p><b>Tissue Specificity:</b> Expression is primarily restricted to central and peripheral nervous system.</p> <p><b>Post-translational modifications:</b> 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 increases polyglutamylated, and reciprocally. The precise function of such modifications is still unclear but they regulate the assembly and dynamics of axonemal microtubules.</p> <p><b>DISEASE:</b> 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</p>

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: 10381](#) Human

[Entrez Gene: 431043](#) Chicken

[Entrez Gene: 22152](#) Mouse

[Entrez Gene: 246118](#) Rat

[Omim: 602661](#) Human

[SwissProt: Q2T9S0](#) Cow

[SwissProt: Q13509](#) Human

[SwissProt: Q9ERD7](#) Mouse

[SwissProt: Q4QRB4](#) Rat

[Unigene: 511743](#) Human

[Unigene: 40068](#) Mouse

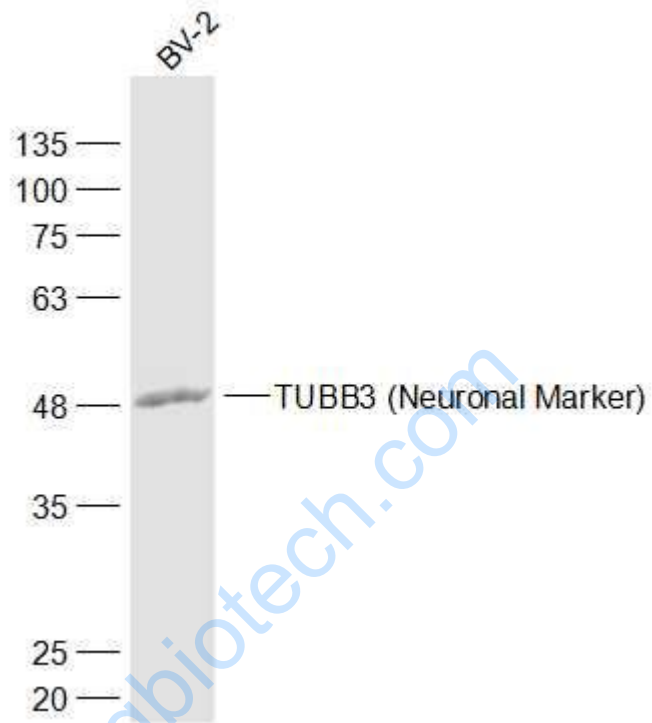
[Unigene: 43958](#) Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

Picture:



Sample:

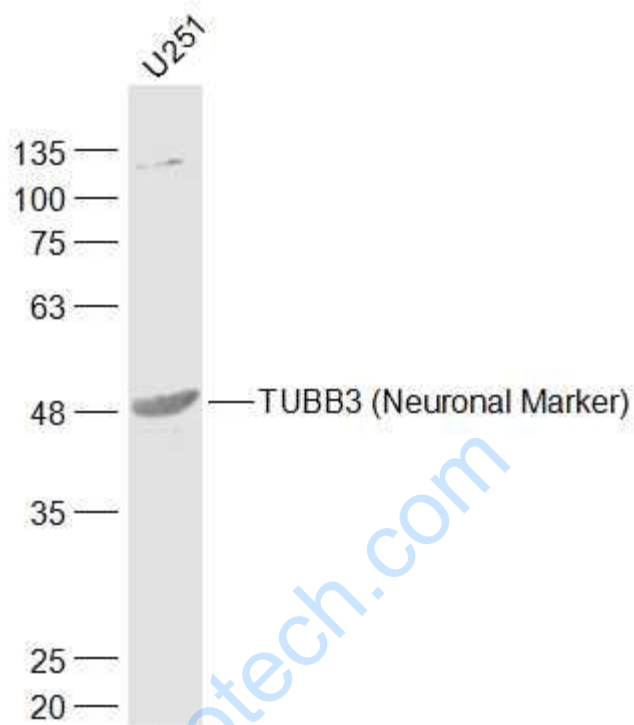
BV-2(Rat) Cell Lysate at 30 ug

Primary: Anti-TUBB3 (Neuronal Marker) (SL4512R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 50-55 kD

Observed band size: 50 kD



Sample:

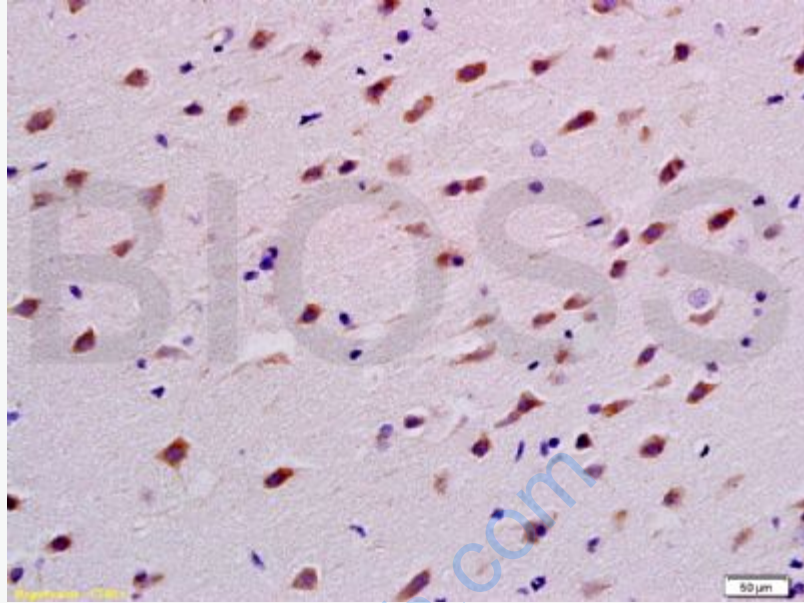
U251(Human) Cell Lysate at 30 ug

Primary: Anti-TUBB3 (Neuronal Marker) (SL4512R) at 1/1000 dilution

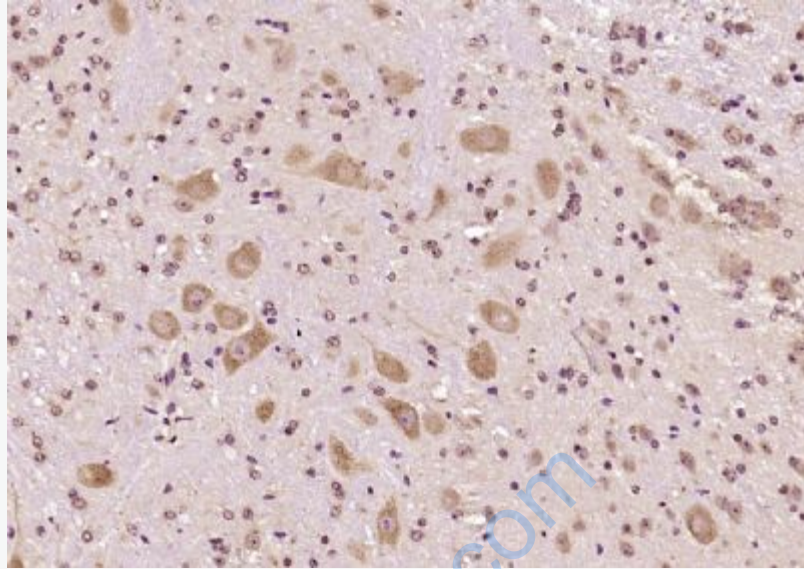
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 50-55 kD

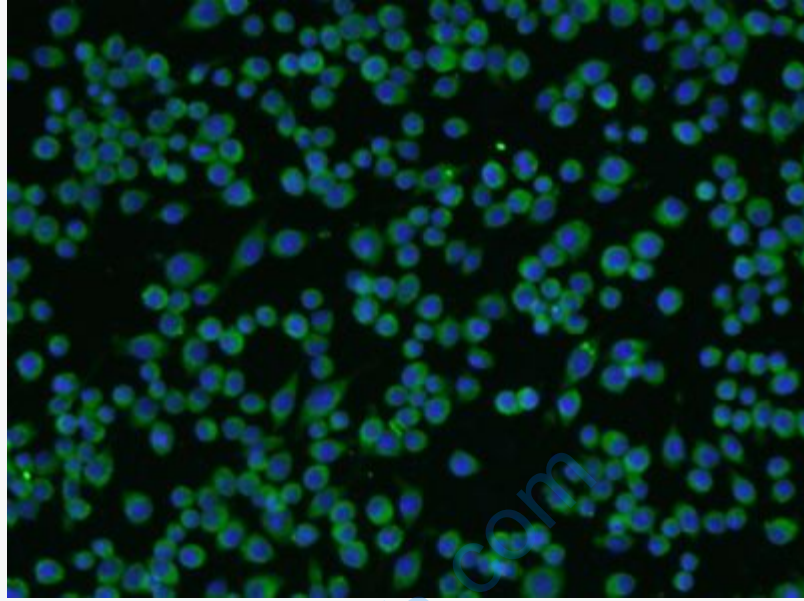
Observed band size: 50 kD



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;  
Incubation: Anti-TUBB3/beta III Tubulin(Neuronal Marker) Polyclonal Antibody, Unconjugated(SL4512R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

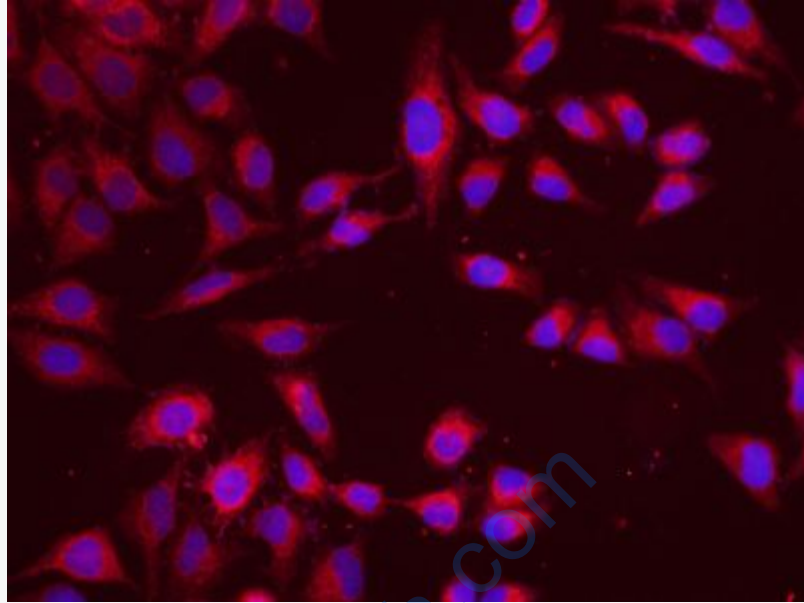


Paraformaldehyde-fixed, paraffin embedded (mouse cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TUBB3 (Neuronal Marker)) Polyclonal Antibody, Unconjugated (SL4512R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

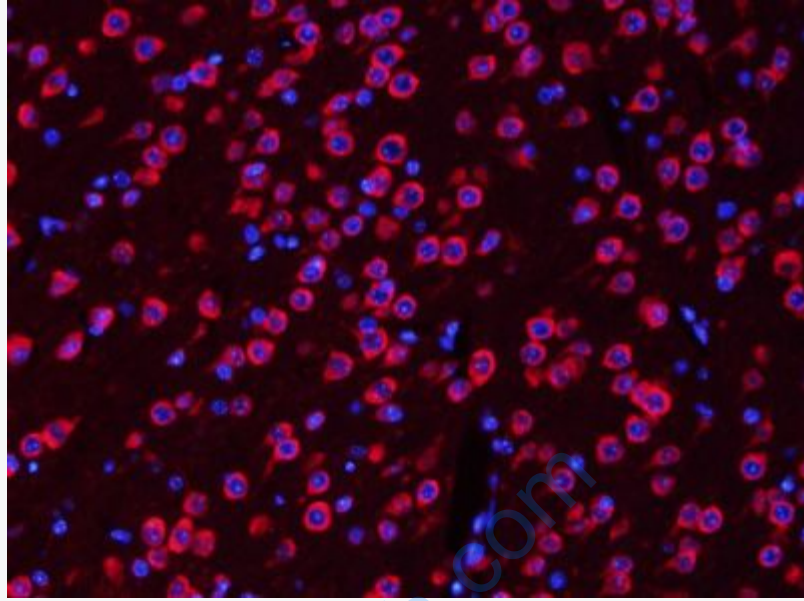


Tissue/cell: BV-2 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (TUBB3) Polyclonal Antibody, Unconjugated (SL4512R) 1:200, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody (SL4512R) at 37°C for 90 minutes, DAPI (5ug/ml, blue, C-0033) was used to stain the cell nuclei.

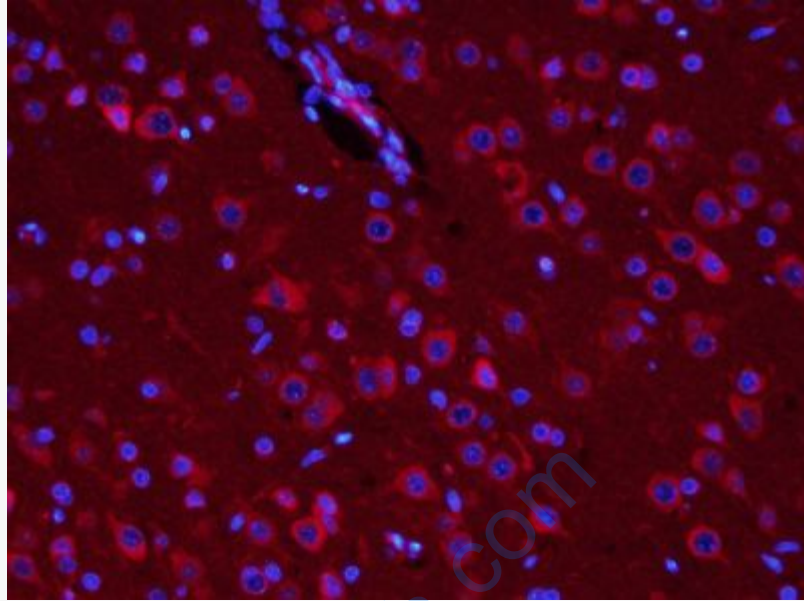




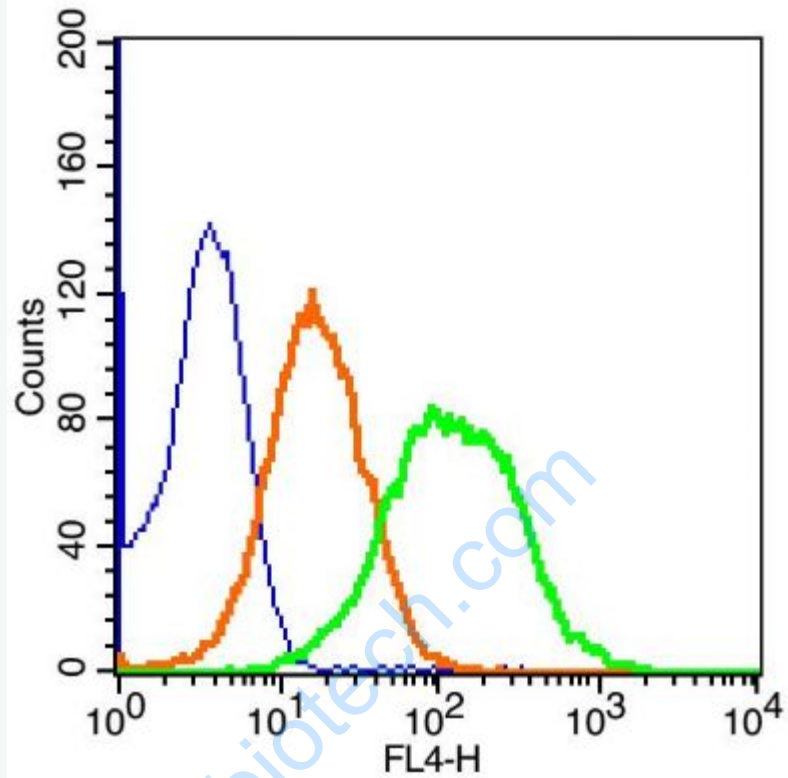
Tissue/cell: HeLa cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (TUBB3) Polyclonal Antibody, Unconjugated (SL4512R) 1:400, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody (SL4512R) at 37°C for 90 minutes, DAPI (5ug/ml, blue, C-0033) was used to stain the cell nuclei.



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 (SL4512R) at 1:400 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (SL4512R) for 90 minutes, and DAPI for nuclei 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 (SL4512R) at 1:400 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (SL4512R) for 90 minutes, and DAPI for nuclei staining.



Blank control(blue): U-87MG Cells(fixed with 2% paraformaldehyde (10 min)).

P rimary Antibody: Rabbit Anti-MGLUR3/AF647 Conjugated antibody (SL4512R),

Dilution: 1 $\mu$ g in 100  $\mu$ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG/AF647(orange) ,used under the same conditions.