



Rabbit Anti-Phospho-MAP2 (Ser136) antibody

SL3259R

Product Name:	Phospho-MAP2 (Ser136)
Chinese Name:	磷酸化微管相关蛋白2抗体
Alias:	MAP2(Phospho Ser136); MAP2 (phospho S136); p-MAP2 (phospho S136); MAP2(Phospho S136); MAP2(Phospho-Ser136); p-MAP2(Phospho-Ser136); DKFZp686I2148; Dendrite specific MAP; DKFZp686I2148; MAP 2; MAP-2; MAP2; MAP2_HUMAN; MAP2A; MAP2B; MAP2C; Microtubule associated protein 2; Microtubule-associated protein 2; Mtap 2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=0.2 μ g /TestIF=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:	70/201kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human MAP2 around the phosphorylation site of Ser136:PP(p-S)P
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:	MAP2 is the major microtubule associated protein of brain tissue. There are three forms

of MAP2; two are similarly sized with apparent molecular weights of 280 kDa (MAP2a and MAP2b) and the third with a lower molecular weight of 70 kDa (MAP2c). In the newborn rat brain, MAP2b and MAP2c are present, while MAP2a is absent. Between postnatal days 10 and 20, MAP2a appears. At the same time, the level of MAP2c drops by 10-fold. This change happens during the period when dendrite growth is completed and when neurons have reached their mature morphology. MAP2 is degraded by a Cathepsin D-like protease in the brain of aged rats. There is some indication that MAP2 is expressed at higher levels in some types of neurons than in other types. MAP2 is known to promote microtubule assembly and to form side-arms on microtubules. It also interacts with neurofilaments, actin, and other elements of the cytoskeleton.

Function:

The exact function of MAP2 is unknown but MAPs may stabilize the microtubules against depolymerization. They also seem to have a stiffening effect on microtubules.

Subcellular Location:

Cytoplasm, cytoskeleton (Probable).

Post-translational modifications:

Phosphorylated at serine residues in K-X-G-S motifs by MAP/microtubule affinity-regulating kinase (MARK1 or MARK2), causing detachment from microtubules, and their disassembly (By similarity). MAP2A/c is phosphorylated. Isoform MAP2c is phosphorylated by FYN at Tyr-67.

Similarity:

Contains 3 Tau/MAP repeats.

SWISS:

P11137

Gene ID:

4133

Database links:

[Entrez Gene: 4133](#)Human

[Entrez Gene: 17756](#)Mouse

[Entrez Gene: 25595](#)Rat

[Omim: 157130](#)Human

[SwissProt: P11137](#)Human

[SwissProt: P20357](#)Mouse

[SwissProt: P15146](#)Rat

[Unigene: 368281](#)Human

[Unigene: 256966](#)Mouse

[Unigene: 10484](#)Rat

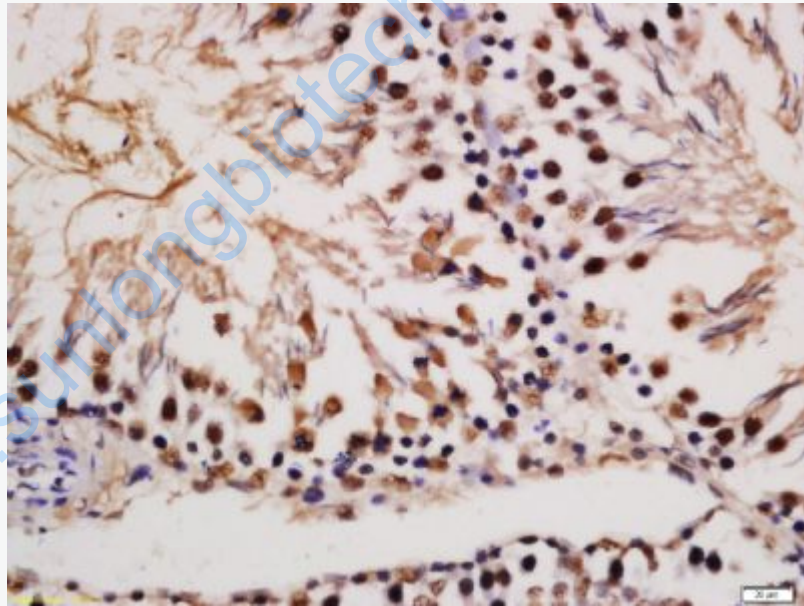
Important Note:

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

微管相关蛋白 2 (MAP-

2) 是一种磷蛋白质, 在正常脑组织中, 主要存在于神经元的胞体、树突和树突棘, 是脑内最丰富的蛋白之一。MAP-

2 在其调节微管的聚合作用和微管的稳定性以及对神经元轴突和树突的发生、延长、稳定和突触可塑性调节具有重要作用。



Picture:

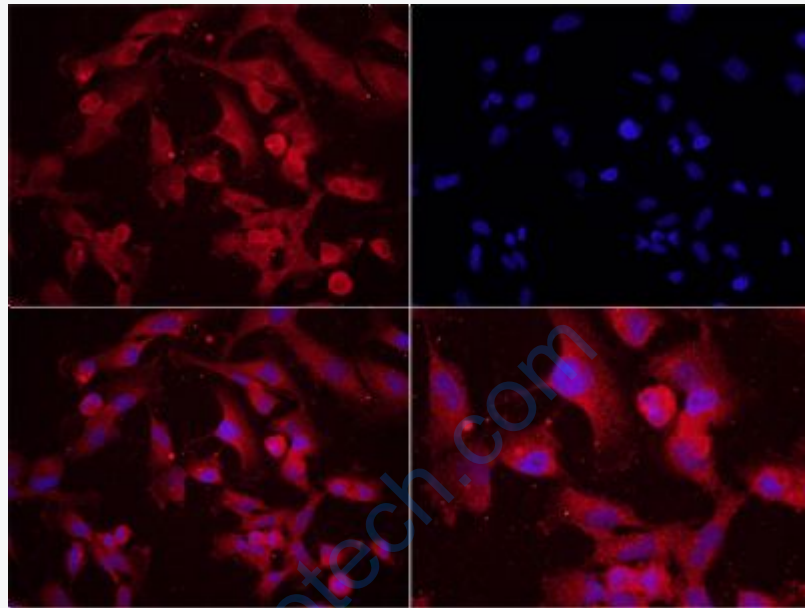
Tissue/cell: rat testis tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

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-Phospho-MAP2 (Ser136) Polyclonal Antibody,

Unconjugated(SL3259R) 1:200, overnight at 4°C, followed by conjugation to the

secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human glioma cells, U251;4% Paraformaldehyde-fixed;

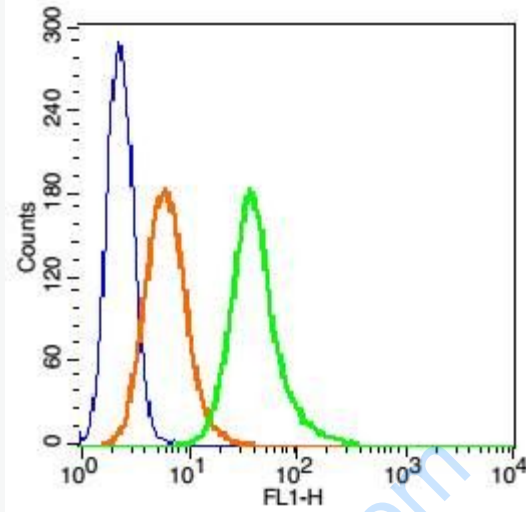
Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Phospho-MAP2(Ser136) Polyclonal Antibody,

Unconjugated(SL3259R) 1:200, overnight at 4°C; The secondary antibody was Goat

Anti-Rabbit IgG, Cy3 conjugated (SL3259R)used at 1:200 dilution for 40 minutes at

37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Blank control: RSC96 Cells(blue).

Primary Antibody: Rabbit Anti-hospho-MAP2(Ser136)/FITC Conjugated antibody (SL3259R), Dilution: 0.2 μ g in 100 μ L 1X PBS containing 0.5% BSA;

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