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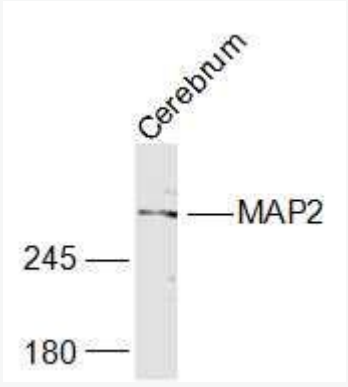
Rabbit Anti-MAP2 antibody

SL1369R

Product Name:	MAP2
Chinese Name:	微管相关蛋白2抗体
Alias:	Microtubule-associated protein 2; DKFZp686I2148; Dendrite specific MAP; DKFZp686I2148; MAP 2; MAP-2; MAP2A; MAP2B; MAP2C; Microtubule associated protein 2; Mtap 2; MAP2_HUMAN.
文献引用 PubMed :	**Specific References(4)**|SL1369R has been referenced in 4 publications. **[IF=4.35]**Gu, LiZe, et al. "Early activation of nSMase2/ceramide pathway in astrocytes is involved in ischemia-associated neuronal damage via inflammation in rat hippocampi." Journal of Neuroinflammation 10.1 (2013): 109.**Rat**. PubMed:24007266 **[IF=2.65]**Zuo, Daiying, et al. "Existence of glia mitigated ketamine-induced neurotoxicity in neuron-glia mixed cultures of neonatal rat cortex and the glia-mediated protective effect of 2-PMPA." Neurotoxicology (2014).**Rat**. PubMed:24931484 **[IF=2.30]**Wang, Jin, et al. "Neuroprotective Effects of Wnt/?-catenin signaling pathway against Aβ-induced Tau protein over-phosphorylation in PC12 cells."Biochemical and Biophysical Research Communications (2016).**Rat**. PubMed:26809093 **[IF=1.61]**Usui, Tatsuya, et al. "Establishment of a novel three-dimensional primary culture model for hippocampal neurogenesis." Physiological Reports 5.12 (2017): e13318.**IF(IHC-P);Mouse**. PubMed:28642339
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=1:200-800（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:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MAP2:1-120/1827
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 similarily 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. MAP2A/c is phosphorylated. Phosphorylated upon DNA damage, probably by ATM or ATR. Isoform MAP2c is phosphorylated by FYN at Tyr-67. **Similarity:** Contains 3 Tau/MAP repeats.

	SWISS: P11137 **Gene ID:** 4133 **Database links:** Entrez Gene: 4133Human Entrez Gene: 25595Rat Omim: 157130Human SwissProt: P11137Human SwissProt: P20357Mouse SwissProt: P15146Rat Unigene: 368281Human Unigene: 256966Mouse **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:	

Sample:

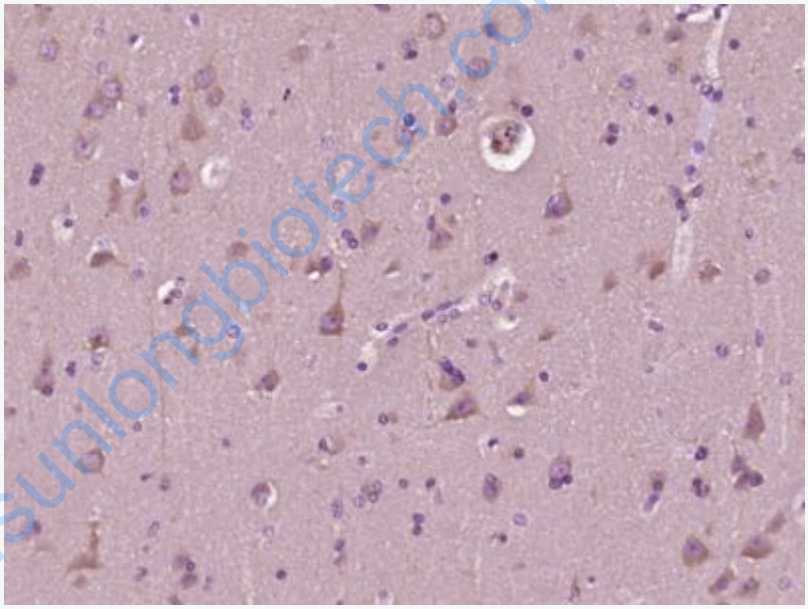
Cerebrum (Mouse) Lysate at 40 ug

Primary: Anti-MAP2 (SL1369R) at 1/1000 dilution

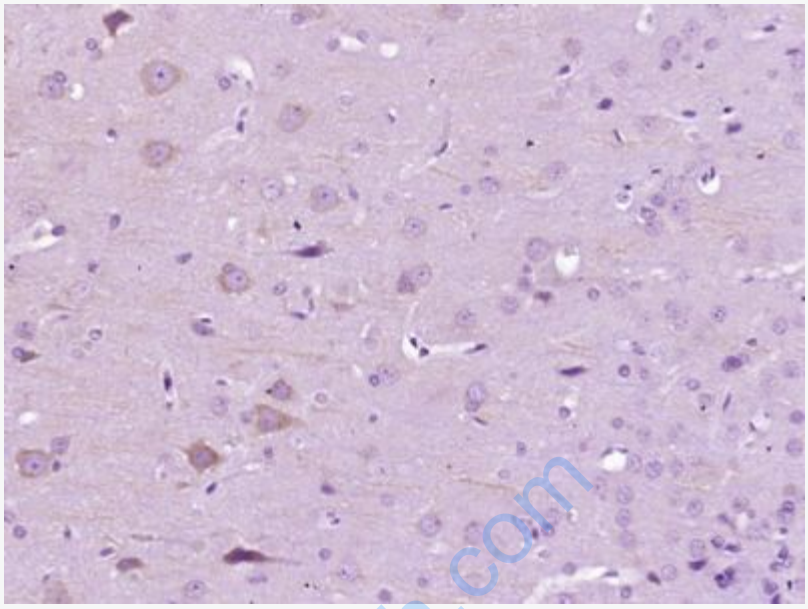
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 201 kD

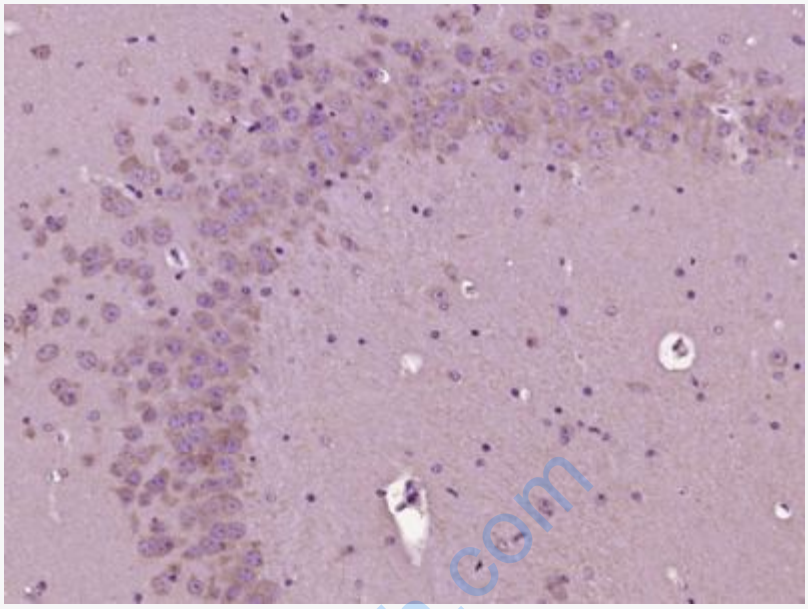
Observed band size: 280 kD



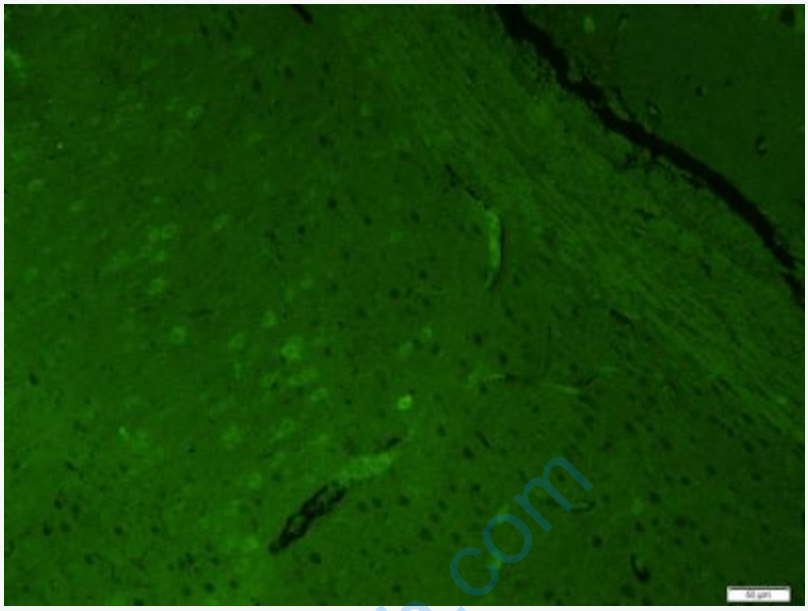
Paraformaldehyde-fixed, paraffin embedded (Human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MAP2) Polyclonal Antibody, Unconjugated (SL1369R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



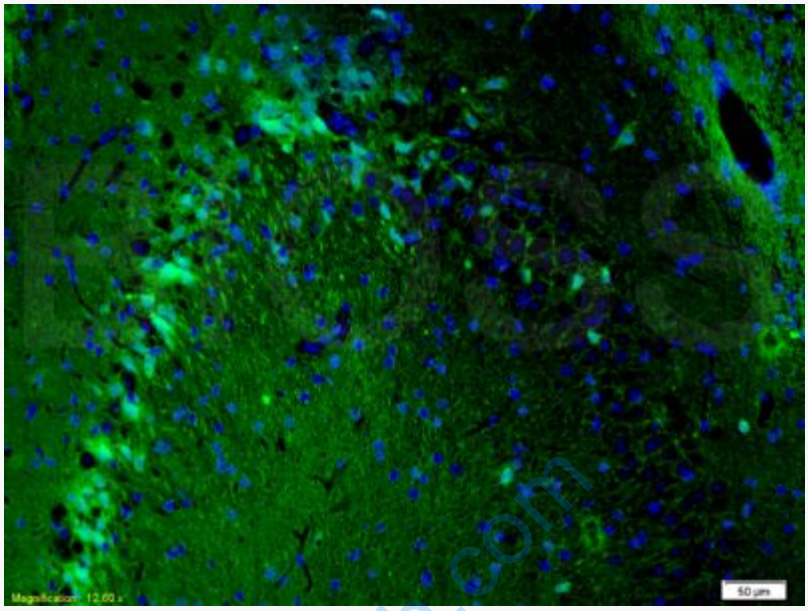
Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MAP2) Polyclonal Antibody, Unconjugated (SL1369R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



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 (MAP2) Polyclonal Antibody, Unconjugated (SL1369R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



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 (MAP2) Polyclonal Antibody, Unconjugated (SL1369R) at 1:400 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (SL1369R) for 90 minutes, and DAPI for nuclei staining.



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

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min;

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

Incubation: Anti-MAP2/MAP-2a.b.c Polyclonal Antibody, Unconjugated(SL1369R) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, FITC conjugated (SL1369R)used at 1:200 dilution for 40 minutes at 37°C.

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