bsm-33073M **[Primary Antibody]**

MAP2 Mouse mAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Mouse
Isotype: IgG1
Clonality: Monoclonal
CloneNo.: 9E5
GeneID: 4133
SWISS: P11137
Target: MAP2
Purification: affinity purified by Protein G
Concentration: 1mg/ml
Storage: Size : 50ul/100ul/200ul
0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Size : 200ug (PBS only)
0.01M PBS
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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.

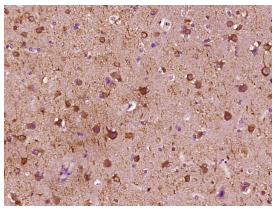
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Human

Predicted MW.: 201 kDa

Subcellular Location: Cytoplasm ,Nucleus

VALIDATION IMAGES



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) Monoclonal Antibody, Unconjugated (bsm-33073M) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Mouse) (sp-0024) instructionsand DAB staining.

SELECTED CITATIONS

- **[IF=9.995]** Qian Fang. et al. YTHDF1 phase separation triggers the fate transition of spermatogonial stem cells by activating the IκB-NF-κB-CCND1 axis. CELL REP. 2023 Apr 14;42(4):112403 IF ;Mouse. 37060562

- **[IF=5.16]** Yang YQ et al. Wild-type p53-induced phosphatase 1 down-regulation promotes apoptosis by activating the DNA damage-response pathway in amyotrophic lateral sclerosis. Neurobiol Dis. 2019 Oct 30;134:104648. IF ;Mouse. 31676238
- **[IF=4.8]** Weiwei Liang. et al.Inhibition of Salt-Inducible Kinase 2 Protects Motor Neurons From Degeneration in ALS by Activating Autophagic Flux and Enhancing mTORC1 Activity..CNS Neuroscience & Therapeutics.2025 Mar;31(3):e70341. IF ;Mouse. 40135564
- **[IF=3.536]** Zhang,et al.Effects of C1 inhibitor on endothelial cell activation in a rat hind limb ischemia-reperfusion injury model.(2018) Journal of Vascular Surgery. :. IF ;Rat. 29395422
- **[IF=3.382]** Wang TH et al. Fisetin Exerts Antioxidant and Neuroprotective Effects in Multiple Mutant hSOD1 Models of Amyotrophic Lateral Sclerosis by Activating ERK. Neuroscience. 2018 May 21;379:152-166. IF ;Mouse. 29559385