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MAP1B Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54348

Specification

MAP1B Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC, E**
Primary Accession	P46821
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**271 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human MAP1B**
Epitope Specificity	**451-550/2468**
Purity	
affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cytoplasm, cytoskeleton. Cytoplasm. Cell junction, synapse. Cell projection, dendritic spine. Note=Colocalizes with DAPK1 in the microtubules and cortical actin fibers.**
SIMILARITY	**Belongs to the MAP1 family.**
SUBUNIT	**3 different light chains, LC1, LC2 and LC3, can associate with MAP1A and MAP1B proteins. LC1 interacts with the amino-terminal region of MAP1B. Interacts with ANP32A and TIAM2. Interacts with the tubulin tyrosine TTL. Interacts (via C-terminus) with GAN (via Kelch domains). Interacts (via N-terminus) with DAPK1.**
Post-translational modifications	**LC1 is generated from MAP1B by proteolytic processing. S-nitrosylation at Cys-2464 enhances interaction with microtubules, and may act as an effector modification for neuronal nitric oxide synthase control of growth-cone size, growth-cone collapse and axon retraction.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
Microtubules, the primary component of the cytoskeletal network, interact with proteins called microtubule-associated proteins (MAPs). The microtubule-associated proteins can be divided into two groups, structural and dynamic. The structural microtubule-associated proteins, MAP-1A, MAP-1B, MAP-2A, MAP-2B and MAP-2C, stimulate tubulin assembly, enhance microtubule stability and influence the spatial distribution of microtubules within cells. Both MAP-1 and, to a greater extent, MAP-2 have been implicated as agents of microtubule depolymerization by suppressing the

dynamic instability of the microtubules. The suppression of microtubule dynamic instability by the MAP proteins is thought to be associated with phosphorylation of the MAPs.

MAP1B Polyclonal Antibody - Additional Information

Gene ID 4131

Other Names
Microtubule-associated protein 1B, MAP-1B, MAP1B heavy chain, MAP1 light chain LC1, MAP1B

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. 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 ℃.

MAP1B Polyclonal Antibody - Protein Information

Name MAP1B

Function
Facilitates tyrosination of alpha-tubulin in neuronal microtubules (By similarity). Phosphorylated MAP1B is required for proper microtubule dynamics and plays a role in the cytoskeletal changes that accompany neuronal differentiation and neurite extension (PubMed:33268592). Possibly MAP1B binds to at least two tubulin subunits in the polymer, and this bridging of subunits might be involved in nucleating microtubule polymerization and in stabilizing microtubules. Acts as a positive cofactor in DAPK1-mediated autophagic vesicle formation and membrane blebbing.

Cellular Location
Cytoplasm, cytoskeleton. Cytoplasm Synapse. Cell projection, dendritic spine Note=Colocalizes with DAPK1 in the microtubules and cortical actin fibers.

MAP1B Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MAP1B Polyclonal Antibody - Images

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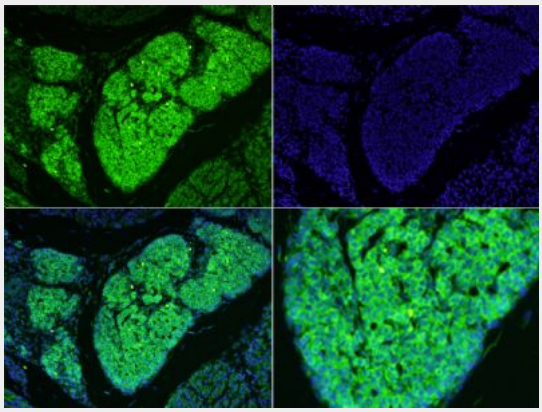

Tissue/cell: mouse embryo tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-MAP1B Polyclonal Antibody, FITC conjugated(bs-11028R-FITC) 1:200, 60 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei