

## **Anti-MAP1B** antibody



**Description** Unconjugated Rabbit polyclonal to MAP1B

Model STJ190960

**Host** Rabbit

**Reactivity** Human, Mouse, Rat

**Applications** IHC

Immunogen Synthesized peptide derived from human MAP1B protein.

**Immunogen Region** 480-560aa

**Gene ID** <u>4131</u>

Gene Symbol MAP1B

**Dilution range** IHC-p 1:50-300

**Specificity** MAP1B Polyclonal Antibody detects endogenous levels of protein.

**Purification** MAP1B antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

Protein Name Microtubule-associated protein 1B MAP-1B MAP1B heavy chain MAP1 light

chain LC1

Molecular Weight 271 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:6836OMIM:157129</u>

Alternative Names Microtubule-associated protein 1B MAP-1B MAP1B heavy chain MAP1 light

chain LC1

**Function** Facilitates tyrosination of alpha-tubulin in neuronal microtubules.

Phosphorylated MAP1B may play a role in the cytoskeletal changes that accompany neurite extension. 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.

Sequence and Domain Family Has a highly basic region with many copies of the sequence KKEE and

KKEI/V, repeated but not at fixed intervals, which is responsible for the

binding of MAP1B to microtubules.

**Cellular Localization** Cytoplasm, cytoskeleton Cytoplasm Cell junction, synapse Cell projection,

dendritic spine. Colocalizes with DAPK1 in the microtubules and cortical

actin fibers.

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.

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