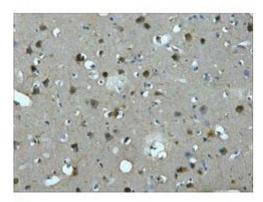


## Anti-MAP2 antibody





**Description** MAP2 is a protein encoded by the MAP2 gene which is approximately

199,5 kDa. MAP2 is localised to the cytoplasm. It is involved in the taxane pathway, neural stem cell differentiation pathways, the TGF-beta pathway and LKB1 signalling events. It is thought to be involved in microtubule assembly, which is an essential step in neurogenesis. MAP2 is expressed in the cells of the nervous system, intestine, heart, pancreas and liver. Mutations in the MAP2 gene may result in ganglioglioma. STJ96969 was developed from clone 7D4 and was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen. This primary antibody detects endogenous MAP2 proteins.

Model STJ96969

**Host** Mouse

**Reactivity** Human, Mouse, Rat

**Applications** IHC

Immunogen Synthetic Peptide

**Gene ID** 4133

Gene Symbol MAP2

**Dilution range** IHC 1:200

**Specificity** The antibody detects endogenous MAP2 proteins.

**Purification** The antibody was affinity-purified from mouse ascites by affinity-

chromatography using specific immunogen.

Clone ID 7D4

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

**Protein Name** Microtubule-associated protein 2 MAP-2

**Clonality** Monoclonal

**Conjugation** Unconjugated

Isotype IgG1

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

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

Database Links <u>HGNC:6839OMIM:157130</u>

Alternative Names Microtubule-associated protein 2 MAP-2

**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.

Cellular Localization Cytoplasm, cytoskeleton Cell projection, dendrite

**Post-translational** Phosphorylated at serine residues in K-X-G-S motifs by MAP/microtubule

**Modifications** affinity-regulating kinase (MARK1 or MARK2), causing detachment from microtubules, and their disassembly . Isoform 2 is probably phosphorylated by

PKA at Ser-323, Ser-354 and Ser-386 and by FYN at Tyr-67. The interaction

with KNDC1 enhances MAP2 threonine phosphorylation .

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