

Phospho-MAP2(S1539) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3668a**Specification**

Phospho-MAP2(S1539) Antibody Blocking peptide - Product InformationPrimary Accession [P11137](#)**Phospho-MAP2(S1539) Antibody Blocking peptide - Additional Information****Gene ID** 4133**Other Names**

Microtubule-associated protein 2, MAP-2, MAP2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP3668a](/products/AP3668a) was selected from the region of human Phospho-MAP2-S1539. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-MAP2(S1539) Antibody Blocking peptide - Protein Information**Name** MAP2**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 Location

Cytoplasm, cytoskeleton. Cell projection, dendrite {ECO:0000250|UniProtKB:P20357}

Phospho-MAP2(S1539) Antibody Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Phospho-MAP2(S1539) Antibody Blocking peptide - Images

Phospho-MAP2(S1539) Antibody Blocking peptide - Background

MAP2 is the major microtubule associated protein of brain tissue. There are three forms of MAP2; two are similarly 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.

Phospho-MAP2(S1539) Antibody Blocking peptide - References

Maddodi,N., et.al., J. Biol. Chem. 285 (1), 242-254 (2010)Krishnan,C., et.al., Am. J. Surg. Pathol. 33 (11), 1695-1704 (2009)