

## **Product datasheet for AP20610PU-S**

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## **MAP2 Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies

Applications: IHC, WB

Recommended Dilution: Western Blot: 1/500-1/1000.

**Immunohistochemistry on Paraffin Sections:** 1/50-1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Specificity:** This antibody detects endogenous levels of MAP-2 protein. (region surrounding Trp14)

Formulation: Phosphate buffered saline (PBS), pH~7.2

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).

Preservative: 0.05% Sodium Azide

**Concentration:** 1.0 mg/ml

**Purification:** Affinity Chromatography using epitope-specific immunogen.

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

Predicted Protein Size: ~280 kDa

**Gene Name:** microtubule associated protein 2

Database Link: Entrez Gene 17756 MouseEntrez Gene 25595 RatEntrez Gene 4133 Human

P11137





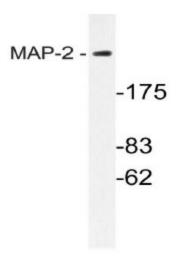
Background:

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.

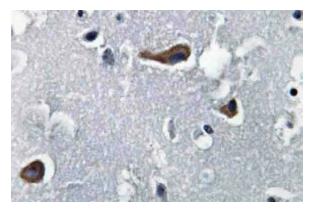
**Synonyms:** Microtubule-associated protein 2, MAP2, Neuronal Marker

**Protein Families:** Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS

## **Product images:**



Western blot (WB) analysis of MAP-2 antibody (Cat.-No.: [AP20610PU-N]) in extracts from mouse brain cells.



Immunohistochemistry (IHC) analyzes of MAP-2 antibody (Cat.-No.: [AP20610PU-N]) in paraffinembedded human brain tissue.