

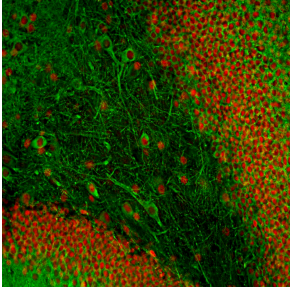
Anti-MAP2 Antibody [2C4] (A85459)

Specifications:

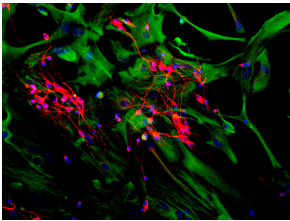
Name:	Anti-MAP2 Antibody [2C4]
Description:	Mouse monoclonal (2C4) antibody to MAP2.
Specificity:	This antibody binds all four MAP2 gene products (MAP2A, MAP2B, MAP2C, and MAP2D) meaning that it binds to the shared core region of these molecules.
Applications:	WB, ICC/IF, IHC
Recommended Dilutions:	WB: 1:5,000-1:10,000, ICC/IF: 1:5,000-1:10,000, IHC: 1:5,000-1:10,000
Reactivity:	Human, Rat, Mouse
Immunogen:	Recombinant full-length human MAP2D protein, expressed in and purified from E. coli.
Host:	Mouse
Clonality:	Monoclonal
Clone ID:	2C4
Isotype:	IgG1
Conjugate:	Unconjugated
Purification:	Immunogen affinity purification.
Concentration:	1 mg/ml
Molecular Weight:	MAP2A/B: ~280 kDa, MAP2C/D: ~70 kDa (by SDS-PAGE)
Product Form:	Liquid
Formulation:	Supplied in Phosphate Buffered Saline with 50% Glycerol and 5mM Sodium Azide.
Storage:	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Disclaimer:	This product is for research use only. It is not intended for diagnostic or therapeutic use.

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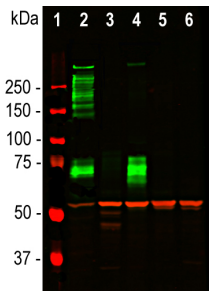
Images:



Immunofluorescent analysis of adult rat hippocampus section stained with Anti-MAP2 Antibody [2C4] (A85459), at a dilution of 1:5,000 in green, and Anti-FOX2 Antibody (A104328), at a dilution of 1:2,000, in red. Following transcardial perfusion of the rat with 4% paraformaldehyde, the brain was post-fixed for 24 hours, cut to 45 μm , and free-floating sections were stained with the above antibodies. Anti-MAP2 Antibody [2C4] (A85459) labels all MAP2 protein isotypes expressed in neuronal perikarya and dendrites. The Anti-FOX2 Antibody (A104328) stains the nuclei of most neuronal cells.



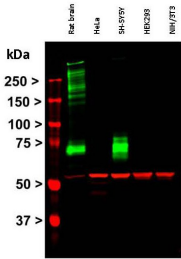
Mixed neuron and glia cultures stained with Anti-MAP2 Antibody (red) and Anti-Vimentin Antibody (A85421 | green) and DNA (blue). Anti-MAP2 Antibody reveals strong cytoplasmic staining of dendrites and perikarya of neuronal cells, while vimentin was visualized in astrocytes and fibroblasts.



Western blot analysis of tissue and cell lysates using Anti-MAP2 Antibody [2C4] (A85459), at a dilution of 1:5,000, in green. The lanes contain samples of: [1] Protein standards, in red, [2] rat whole brain lysate, [3] HeLa cells, [4] SH-SY5Y cells, [5] HEK293 cells and [6] NIH-3T3 cell lysates. A band at about 280 kDa corresponds to the full length intact MAP2A/2B isotypes, while bands at about 70 kDa represent MAP2C/D isotypes. Multiple bands in between are likely in vivo fragments of MAP2A/B. Only the SH-SY5Y cells, which have neuronal properties, express MAP2 protein. The same blot was simultaneously probed with Anti-Vimentin Antibody (A85421), at a dilution of 1:5,000, in red. The Anti-Vimentin Antibody (A85421) binds to a single band at approximately 50 kDa present in all preparations, so acts as a positive loading control.

Anti-MAP2 Antibody [2C4] (A85459)

Images continued:



Western blot of Rat whole brain extract, Hela, SH-SY5Y, HEK293, and NIH/3T3 cells probed with Anti-MAP2 Antibody (green). All forms of MAP2 are present in the rat brain homogenate. A band at ~280 kDa corresponds to full length intact MAP2A/2B. Bands appearing at 70kDa correspond to MAP2C/D. The fainter bands in between correspond to in vivo fragments of MAP2A/B, which are very sensitive to proteases. Of the four cell lines tested, only the SH-SY5Y cell line, which has neuronal properties, is positive for ~70kDa MAP2C/D. Blot was simultaneously probed with Anti-Vimentin Antibody (A85421 | red), showing a single strong band at ~50 kDa.