

# MAP2 Monoclonal Antibody (AP20)

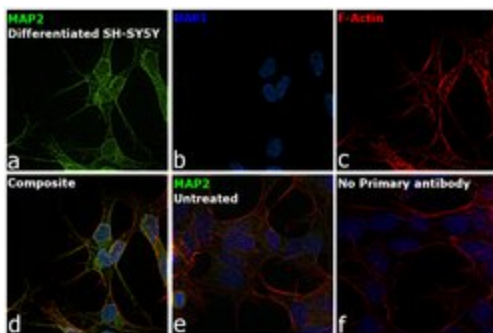
Product Details	
Size	50 µL
Species Reactivity	Amphibian, Avian, Bovine, Human, Mouse, Rat, Xenopus
Published Species	Human, Mouse, Guinea pig
Host/Isotope	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	AP20
Conjugate	Unconjugated
Immunogen	Bovine protein.
Form	Liquid
Concentration	Conc. Not Determined
Storage buffer	Ascites
Contains	15mM sodium azide
Storage Conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_794874

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	1:200	1 Publication
Immunofluorescence (IF)	1:200	-
Immunohistochemistry (Paraffin) (IHC (P))	Assay Dependent	2 Publications
Western Blot (WB)	1:500	-
Immunohistochemistry (IHC)	-	2 Publications

## Product Specific Information

Recommended positive controls: rat cerebral cortex.

Store product as a concentrated solution. Centrifuge briefly prior to opening the vial.

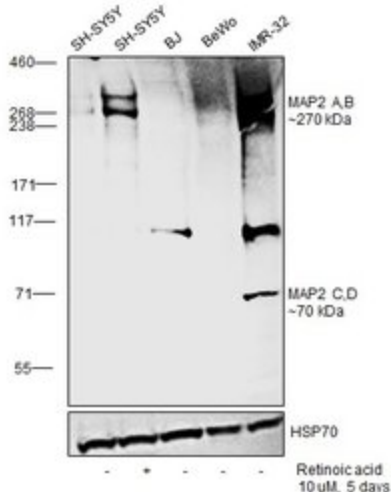


### MAP2 Antibody (MA1-25044)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell models owing to their inherent genetic constitution. Immunofluorescence analysis using Anti-MAP2 Monoclonal Antibody (AP20) (Product # MA1-25044), shows an increased expression of MAP2 in SH-SY5Y cells differentiated to Neurons (Retinoic acid, 10 uM 5 days) compared to the undifferentiated cells. Relative expression validation info.

### MAP2 Antibody (MA1-25044)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell lines owing to their inherent genetic constitution. Increased expression of Microtubule-associated protein 2 was observed in SH-SY5Y differentiated to neurons (Retinoic acid, 10 uM for 5 days) compared to untreated SH-SY5Y using Anti-MAP2 Monoclonal Antibody (AP20) (Product # MA1-25044) in Western Blot. Also the same was used to observe higher expression of MAP2 in IMR-32 compared to BJ and BeWo. Relative expression validation info.



## Product Images For MAP2 Monoclonal Antibody (AP20)

### MAP2 Antibody (MA1-25044) in ICC

Immunofluorescence analysis of Microtubule-associated protein 2 was performed using 70% confluent log phase SH-SY5Y cells differentiated to neurons (Retinoic acid, 10 uM for 5 days). The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with MAP2 Monoclonal Antibody (AP20) (Product # MA1-25044) at 1:200 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Donkey anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32766), (1:2000 dilution), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b: Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300 dilution). Panel d represents the merged image showing neuronal dendrites, cytoplasm, plasma membrane and cytoskeleton localization. Panel e represents undifferentiated SH-SY5Y cells showing lower expression of MAP2. Panel f represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

View more figures on [thermofisher.com](http://thermofisher.com)

## 5 References

### Immunohistochemistry (Paraffin) (2)

#### Acta neuropathologica

#### Abnormal serine phosphorylation of insulin receptor substrate 1 is associated with tau pathology in Alzheimer's disease and tauopathies.

"MA1-25044 was used in immunohistochemistry - paraffin section to determine the expression of abnormal serine phosphorylation of insulin receptor substrate 1 in healthy and diseased human brains"

Authors: Yarchoan M, Toledo JB, Lee EB, Arvanitakis Z, Kazi H, Han LY, Louneva N, Lee VM, Kim SF, Trojanowski JQ, Arnold SE

**Species**  
Human

**Dilution**  
1:400

**Year**  
2014

#### Neurobiology of disease

#### ABCA1 influences neuroinflammation and neuronal death.

"MA1-25044 was used in immunohistochemistry - paraffin section to elucidate the cell-type specific role of ABCA1 in neuroinflammation in vivo."

Authors: Karasinska JM, de Haan W, Franciosi S, Ruddle P, Fan J, Kruit JK, Stukas S, Lütjohann D, Gutmann DH, Wellington CL, Hayden MR

**Species**  
Mouse

**Dilution**  
1:6000

**Year**  
2013

### Immunocytochemistry (1)

#### Cell reports

#### Transcriptional elongation factor elongin A regulates retinoic acid-induced gene expression during neuronal differentiation.

"MA1-25044 was used in immunocytochemistry to study retinoic acid-induced gene expression during neuronal differentiation and the role played by elongin A"

Authors: Yasukawa T, Bhatt S, Takeuchi T, Kawauchi J, Takahashi H, Tsutsui A, Muraoka T, Inoue M, Tsuda M, Kitajima S, Conaway RC, Conaway JW, Trainor PA, Aso T

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2012

### Immunohistochemistry (2)

#### Developmental dynamics : an official publication of the American Association of Anatomists

#### Neural tube defects and impaired neural progenitor cell proliferation in Gbeta1-deficient mice.

"MA1-25044 was used in immunohistochemistry to study the effect of Gbeta1-deficiency on neural tube and neural progenitor cell proliferation"

Authors: Okae H, Iwakura Y

**Species**  
Mouse

**Dilution**  
1:100

**Year**  
2010

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