For Research Use Only

MAP1B Polyclonal antibody

Catalog Number:21633-1-AP Featured Product 14 Publications

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Basic Information

Catalog Number:
21633-1-AP

Size:
700 ug/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG16255

GenBank Accession Number:
BC141853

GeneID (NCBI):
4131

UNIPROT ID:
P46821

Full Name:
microtubule-associated protein 1B

Calculated MW:
2468 aa, 271 kDa

Observed MW:
320 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IHC 1:200-1:800
IF-P 1:50-1:500
IF/ICC 1:10-1:100

Applications

Tested Applications:
WB, IHC, IF/ICC, IF-P, FC (Intra), ELISA

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse

Cited Species:
human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse cerebellum tissue, human brain tissue

IHC : mouse brain tissue, mouse cerebellum tissue

IF-P : mouse brain tissue,

IF/ICC : SH-SY5Y cells,

Background Information

Microtubule-associated protein 1B (MAP1B) is a cytoskeleton protein which can promote microtubule assembly. Previous reports have suggested that this protein is closely involved in neuronal development based on its extensive expression in the developing brain and moderate in mature neurons. Gene disruption or knockout studies of the MAP1B gene led to a delayed development of the nervous system in mice. It includes the N-terminal heavy chain and a C-terminal light chain. The MAP1B heavy chain has a microtubule-stabilization effect, and contains an actin-binding site that may play a role in the crosslinking of actin and microtubules, a function that may be important in neurite elongation. Various isoforms around 300-350 kDa of MAP1B can be observed due to the differences in phosphorylation state. (10704485)

Notable Publications

Author	Pubmed ID	Journal	Application
Jing-Yi Long	32927026	Neurochem Int	WB,IF
Monica C Lannom	34847178	PLoS One	WB
Junyu Wu	27715397	Cell Cycle	WB

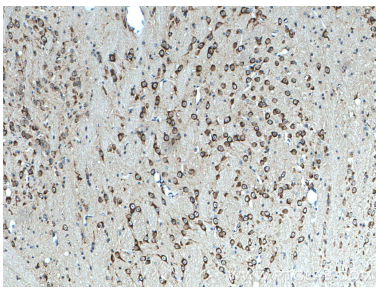
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

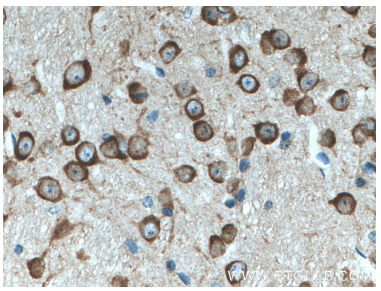
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

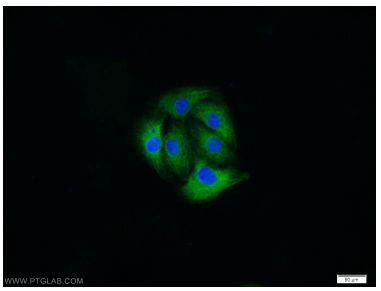
Selected Validation Data



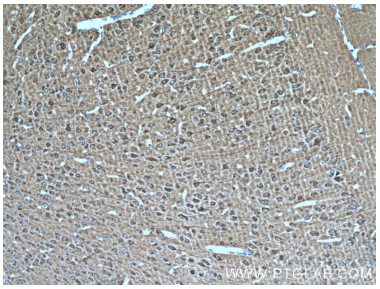
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21633-1-AP (MAP1B antibody) at dilution of 1:400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



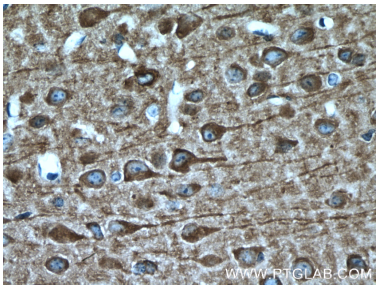
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21633-1-AP (MAP1B antibody) at dilution of 1:400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



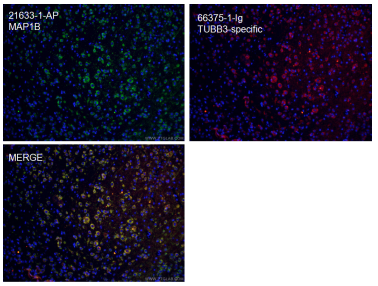
Immunofluorescent analysis of SH-SY5Y cells using 21633-1-AP (MAP1B antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



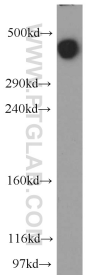
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21633-1-AP (MAP1B antibody) at dilution of 1:400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



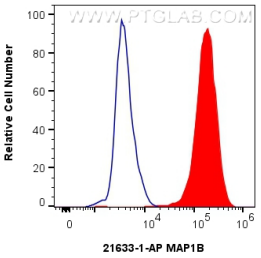
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21633-1-AP (MAP1B antibody) at dilution of 1:400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using 21633-1-AP (MAP1B antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



mouse cerebellum tissue were subjected to SDS PAGE followed by western blot with 21633-1-AP (MAP1B antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



1x10^6 SH-SY5Y cells were intracellularly stained with 0.4 ug MAP1B Polyclonal antibody (21633-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.4 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).