## For Research Use Only

# MAP1B Polyclonal antibody

Catalog Number: 21633-1-AP

Featured Product

15 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 21633-1-AP BC141853

21633-1-AP BC141853
Size: GeneID (NCBI):

150ul , Concentration: 700 ug/ml by 4131
Nanodrop and 493 ug/ml by Bradford UNIPROT ID: method using BSA as the standard; P46821

Source: Full Name:

Rabbit microtubule-associated protein 1B

Isotype:Calculated MW:IgG2468 aa, 271 kDaImmunogen Catalog Number:Observed MW:AG16255320 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

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:

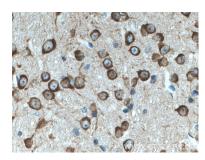
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com W: ptglab.com This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

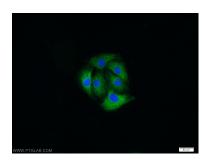
## **Selected Validation Data**



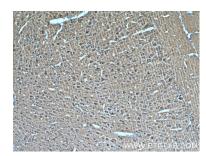
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 21633-1-AP (MAP1B antibody) at dilution of 1:400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



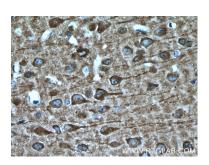
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 21633-1-AP (MAP1B antibody) at dilution of 1:400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



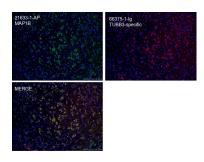
Immunofluorescent analysis of SH-SY5Y cells using 21633-1-AP (MAP1B antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated Goat Anti-Rabbit 1¤G(H+I).



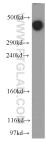
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 21633-1-AP (MAP1B antibody) at dilution of 1:400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



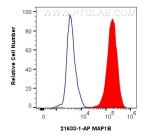
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 21633-1-AP (MAP1B antibody) at dilution of 1:400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 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 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).