beta-3 Tubulin Monoclonal Antibody (2G10)

Product Details	
Size	100 µg
Species Reactivity	Bovine, Guinea pig, Hamster, Human, Mouse, Pig, Rabbit, Rat
Published Species	Rabbit, Rat, Amphibian, Zebrafish, Human, Mouse
Host/Isotype	Mouse / IgG2a
Class	Monoclonal
Type	Antibody
Clone	2G10
Conjugate	Unconjugated
Immunogen	A synthetic peptide corresponding to amino acids 436-450 from rat neuronal specific beta-3 tubulin.
Form	Liquid
Concentration	1 mg/mL
Purification	Protein A
Storage buffer	PBS with 1mg/mL BSA, 30% glycerol
Contains	0.05% sodium azide
Storage conditions	-20°C
RRID	AB_2536829

Applications	Tested Dilution	Publications
Western Blot (WB)	1:500-1:2,000	4 Publications
Immunohistochemistry (IHC)	Assay-dependent	8 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:50-1:200	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	Assay-dependent	1 Publication
Immunocytochemistry (ICC/IF)	1:50-1:200	16 Publications
Flow Cytometry (Flow)	1:50	-
Immunoprecipitation (IP)	5 µg	-

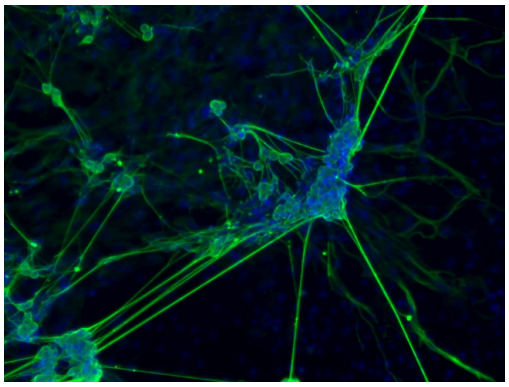
Product Specific Information

MA1-118 was successfully used to detect E18 Sparague Dawley primary cortical neurons.

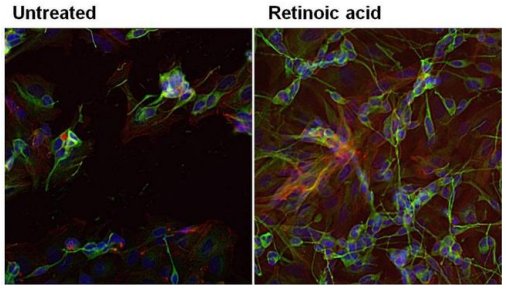
MA1-118 can be used for immunofluorescence analysis of beta III tubulin in the ectoderm derived from human embryonic stem cells.

Western blot analysis of MA1-118 detects an ~50 kDa protein in neuronal-type cells. In bovine, a unknown band at ~32 kDa is also detected. MA1-118 shows specificity to beta-3 Tubulin and is non-reactive to lysates from non-neuronal cell types (e.g. HeLa cell lysate).

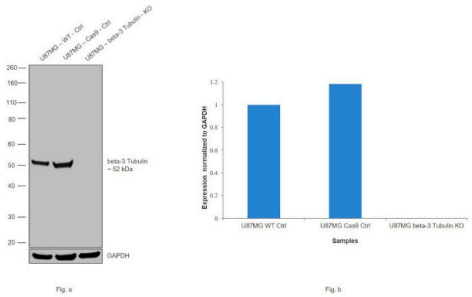
Product Images For beta-3 Tubulin Monoclonal Antibody (2G10)



beta-3 Tubulin Antibody (MA1-118) in ICC/IF
Immunofluorescence analysis of beta III tubulin (green) in the ectoderm derived from human ES cells. Embryoid bodies (EBs) were generated from the H9 embryonic stem cell line (WiCell Research Institute, WA09) using Gibco® KnockOut™ Serum Replacement. After four days in suspension culture, EBs were plated on Geltrex™-coated tissue culture-treated polystyrene and continuously cultured for 21 days. EB cultures were then fixed and permeabilized according to the 3-Germ Layer Immunocytochemistry Kit (Product # A25538) and stained with anti-beta III-tubulin monoclonal antibody (Product # MA1-118, 1:200 dilution, 5 uL/mL final) at 4°C overnight. Secondary staining was completed using Alexa Fluor™ 488-conjugated anti-mouse IgG (Product # A-11001) and DAPI (Product # D1306) for nuclear DNA (blue) for 1 h at room temperature. Images were taken on EVOS® FL Auto Imaging System at 10X magnification.



beta-3 Tubulin Antibody (MA1-118)
The specificity of mouse anti-Beta-3-Tubulin monoclonal antibody (Product # MA1-118) was demonstrated in the immunofluorescence analysis the detection of increased expression of Beta-3-Tubulin in SHSY5Y cells upon treatment with 10 uM Retinoic acid compared to untreated cells. {TM}



beta-3 Tubulin Antibody (MA1-118)
Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A loss of signal was observed for target protein in beta-3 Tubulin (KO) cell line compared to control cell line using Anti-beta-3 Tubulin Monoclonal Antibody (Product # MA1-118). {KO}

View more figures on thermofisher.cn

30 References

Western Blot (4)

Science advances

CREB3L2-ATF4 heterodimerization defines a transcriptional hub of Alzheimer's disease gene expression linked to neuropathology.

"MA1-118 was used in Western Blotting to reveal differential transcription factor dimerization as a mechanism linking disease stimuli to the development of pathogenic cellular states."

Authors: Gouveia Roque C,Chung KM,McCurdy EP,Jagannathan R,Randolph LK,Herline-Killian K,Baleriola J,Hengst U

Year 2023

Species Rat

Dilution 1:20000

Frontiers in molecular neuroscience

Growth Cone Tctp Is Dynamically Regulated by Guidance Cues.

"MA1-118 was used in Western Blotting to study the dynamic regulation of growth cone translationally controlled tumour protein by Netrin-1 and Ephrin-A1."

Authors: Gouveia Roque C,Holt CE

Year 2022

Species Rat

Dilution 1:10,000

View more WB references on thermofisher.cn

Immunohistochemistry (8)

The Journal of clinical investigation

Silencing miR-21-5p in sensory neurons reverses neuropathic allodynia via activation of TGF--related pathway in macrophages.

"MA1-118 was used in Immunohistochemistry-immunofluorescence to show that miR-21 conditional deletion in DRG neurons was coupled with lack of upregulation of chemokine CCL2 after nerve injury and reduced accumulation of CCR2-expressing macrophages, which showed TGF--related pathway activation and acquired an M2-like antinociceptive phenotype."

Authors: Zeboudj L,Sideris-Lampretsas G,Silva R,Al-Mudaris S,Picco F,Fox S,Chambers D,Malcangio M

Year 2023

Species Mouse

Dilution 1:1,000

The Journal of clinical investigation

Mechanisms and treatments of neuropathic itch in a mouse model of lymphoma.

"MA1-118 was used in Immunohistochemistry to suggest distinct mechanisms underlying acute, chronic, and neuropathic itch."

Authors: Chen O,He Q,Han Q,Furutani K,Gu Y,Olexa M,Ji RR

Year 2023

Species Mouse

Dilution 1:200

View more IHC references on thermofisher.cn

More applications with references on thermofisher.cn

IHC (P) (1) **IHC (F) (1)** **ICC/IF (16)**