Neuron-specific β-III Tubulin Antibody

Monoclonal Mouse IgG_{2A} Clone # TuJ-1

Catalog Number: MAB1195

DESCRIPTION

Specificity	Detects neuron-specific β-III Tubulin in Western blots.
Source	Monoclonal Mouse IgG_{2A} Clone # TuJ-1
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Rat brain-derived microtubules
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

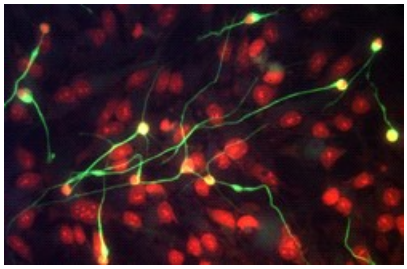
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	1 µg/mL	β-III Tubulin
Immunocytochemistry	8-25 µg/mL	See Below
Simple Western	10 µg/mL	See Below

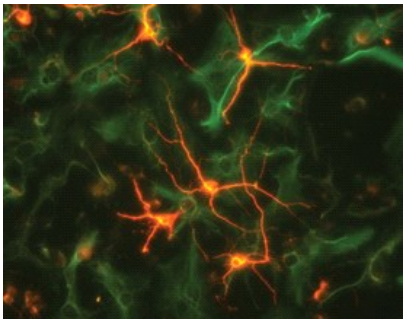
DATA

Immunocytochemistry



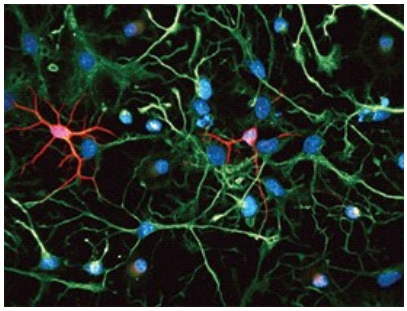
β-III Tubulin in Differentiated Human Neural Progenitor Cells. β-III Tubulin was detected in immersion fixed differentiated human neural progenitor cells using Neuron-specific β-III Tubulin Monoclonal Antibody (clone TuJ-1) (Catalog # MAB1195) for 3 hours at room temperature. Cells were stained (green) and counterstained (red). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

Immunocytochemistry



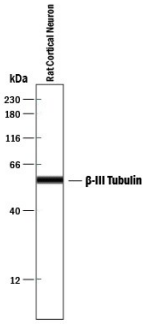
β-III Tubulin in Rat Cortical Neurons and GFAP in Rat Astrocytes. β-III Tubulin was detected in rat cortical neurons using 5 µg/mL neuron-specific Mouse β-III Tubulin Monoclonal (clone TuJ-1) Antibody (Catalog # MAB1195). GFAP was detected in rat astrocytes using 10 µg/mL Human GFAP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2594). Cells were incubated with primary antibodies for 3 hours at room temperature. Cells were stained for beta-III Tubulin using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and for GFAP using the NorthernLights 493-conjugated Anti-Sheep IgG Secondary Antibody (green; Catalog # NL012). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

Immunocytochemistry



β-III Tubulin and Nestin in Rat Cortical Stem Cells. β-III Tubulin and Nestin were detected in rat cortical stem cells (Catalog # NSC001) using 5 µg/mL neuron-specific Mouse β-III Tubulin Monoclonal (clone TuJ-1) Antibody (Catalog # MAB1195) and 10 µg/mL Rat Nestin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2736). Cells were incubated with primary antibodies for 3 hours at room temperature. Cells were stained for beta-III Tubulin using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and for Nestin using the NorthernLights 493-conjugated Anti-Goat IgG Secondary Antibody (green; Catalog # NL003). Tissue was counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

Simple Western



Detection of Rat β-III Tubulin by Simple Western™. Simple Western lane view shows lysates of rat cortical neurons, loaded at 0.2 mg/mL. A specific band was detected for β-III Tubulin at approximately 56 kDa (as indicated) using 10 µg/mL of Mouse Anti-Neuron-specific β-III Tubulin Monoclonal Antibody (Catalog # MAB1195). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

Neuron-specific β-III Tubulin Antibody

Monoclonal Mouse IgG_{2A} Clone # TuJ-1

Catalog Number: MAB1195

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

β-III Tubulin, also known as tubulin β-4, is regarded as a neuron-specific marker. The expression of β-III Tubulin has been suggested to be one of the earliest markers to signal commitment in primitive neuroepithelium.

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