

DESCRIPTION

Specificity	Detects mammalian and chicken neuron-specific β -III tubulin but not other β -tubulin isotypes.
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 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

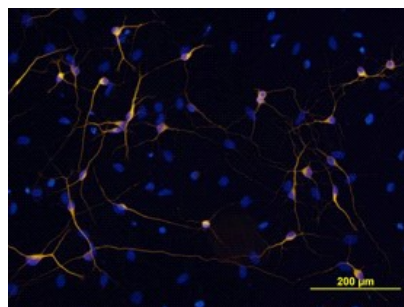
APPLICATIONS

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 μ g/mL	β -III Tubulin
Immunocytochemistry	8-25 μ g/mL	See Below

DATA

Immunocytochemistry



β -III Tubulin in Rat Cortical Stem Cells. β -III Tubulin was detected in immersion fixed 7 day differentiated rat cortical stem cells using Neuron-specific β -III Tubulin Biotinylated Monoclonal Antibody (Catalog # BAM1195) at 10 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (yellow; Catalog # NL999) and counter-stained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

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.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 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

Class III beta tubulin, also known as tubulin β -4, is regarded as a neuron-specific marker. The expression of class III β -tubulin has been suggested to be one of the earliest markers to signal neuronal commitment in primitive neuroepithelium (1, 2).

References:

1. Caccamo, D. *et al.* (1989) Lab. Invest. **60**:390.
2. Alexander, J. *et al.* (1991) Proc. Natl. Acad. Sci. USA **88**:4685.