Anti-Beta-Tubulin III Antibody, Clone TUJ1

Antibodies

Mouse monoclonal IgG2a antibody against human, mouse, rat beta-tubulin III, unconjugated

Catalog #60052

250 µL 1 mg/mL

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Product Description

This antibody clone is well characterized and strongly reacts with neuron specific Class III β-Tubulin and not β-Tubulin found in glial cells.

Target Antigen Name:	Beta-Tubulin III
Alternative Names:	CDCBM, CDCBM1, CFEOM3, CFEOM3A, Class III beta-tubulin, FEOM3, TUBB4, Tubulin beta-3 chain, Tubulin beta-III, Tubulin beta-4 chain
Gene ID:	10381
Species Reactivity:	Human, Mouse, Rat
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	TUJ1
Isotype:	IgG2a
Immunogen:	Rat brain microtubules
Conjugate:	Unconjugated

Applications

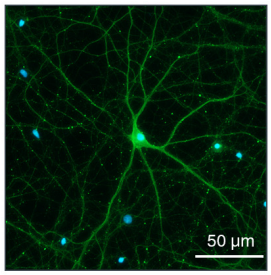
Verified:	ICC
Reported:	FC, ICC, IF, IHC, IP, WB

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution containing 0.03% Thimerosal
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	The suggested use of this antibody is: ICC, 1:1000 - 1:5000 dilution; IHC, 1:500 - 1:5000 dilution; WB, 1:1000 dilution. It is recommended that the antibody be titrated for optimal performance for each application. For further instructions on how to use this antibody, refer to the Technical Manual: In Vitro Proliferation and Differentiation of Human Neural Stem and Progenitor Cells Using NeuroCult™ or NeuroCult™-XF (Document #28724) available on our website at www.stemcell.com.

Data



E18 cortical rat neurons were cultured using NeuroCult™ SM1 Neuronal Culture Kit on poly-L-ornithine and laminin-coated glass coverslips, then fixed and labeled with Anti-Beta-Tubulin III Antibody, Clone TUJ1, followed by donkey anti-mouse IgG, Alexa Fluor® 488, and counterstained with DAPI.

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

1. Nakagomi T et al. (2015) Brain vascular pericytes following ischemia have multipotential stem cell activity to differentiate into neural and vascular lineage cells. Stem Cells 33(6): 1962–74. (ICC, IF, IHC, WB)
2. Hagelkruys A et al. (2014) A single allele of Hdac2 but not Hdac1 is sufficient for normal mouse brain development in the absence of its paralog. Development 141(3): 604–16. (IHC, WB)
3. Li Y et al. (2014) Topoisomerase II beta is required for proper retinal development and survival of postmitotic cells. Biol Open 3(2): 172–84. (ICC, IF)
4. Wang L et al. (2014) A conserved axon type hierarchy governing peripheral nerve assembly. Development 141(9): 1875–83. (IHC)
5. Amoroso MW et al. (2013) Accelerated high-yield generation of limb-innervating motor neurons from human stem cells. J Neurosci 33(2): 574–86. (ICC, IF)
6. Zonis S et al. (2013) p21Cip restrains hippocampal neurogenesis and protects neuronal progenitors from apoptosis during acute systemic inflammation. Hippocampus 23(12): 1383–94. (ICC, IF, IHC)
7. Lorthongpanich C et al. (2008) Chemical enhancement in embryo development and stem cell derivation from single blastomeres. Cloning Stem Cells 10(4): 503–12. (ICC, IF)
8. Goodwin HS et al. (2001) Multilineage differentiation activity by cells isolated from umbilical cord blood: Expression of bone, fat, and neural markers. Biol Blood Marrow Transplant 7(11): 581–8. (ICC, IF, WB)