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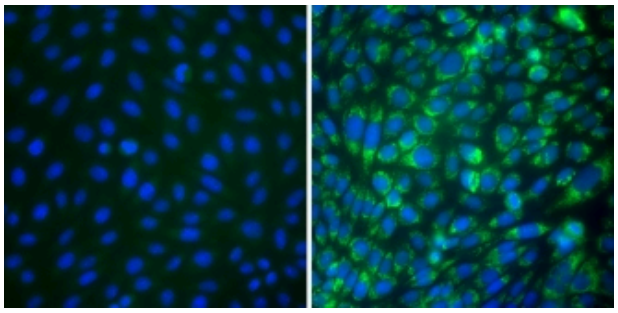
Anti-Mouse/Rat Nestin Purified

Catalog Number: 14-5843
Also Known As:NES
RUO: For Research Use Only



Immunocytochemistry of fixed and permeabilized PC12 cell line using 10 µg/ml of Mouse IgG1 κ Isotype Control Purified (cat. 14-4714) (left) or 10 µg/ml of Anti-Mouse/Rat Nestin Purified (right) followed by Anti-Mouse IgG Biotin (cat. 13-4013) and Streptavidin FITC (cat. 11-4317). Nuclei are counterstained with DAPI.

Product Information

Contents: Anti-Mouse/Rat Nestin Purified
REF Catalog Number: 14-5843
Clone: Rat-401 (Rat401 (4D4))
Concentration: 0.5 mg/ml
Host/Isotype: Mouse IgG1

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C.
LOT Batch Code: Refer to Vial
Use By: Refer to Vial

Description

The monoclonal antibody Rat-401 recognizes mouse and rat nestin, a Class VI intermediate filament protein (>170 kDa) primarily expressed in neuroepithelial stem cells. Upon neural differentiation, expression is down-regulated and within the adult nervous system is limited to progenitor cells in the cortical subventricular zone, the hippocampal dentate gyrus, dorsal root ganglia satellite cells, and a subpopulation of Schwann cells. Nestin expression is also present in other progenitor cell populations such as pancreatic islet, angiogenic endothelial cells, and bone marrow mesenchymal stem cells. Nestin filaments require vimentin and desmin for assembly into heterodimers and polymers. Upon differentiation, Nestin-containing filaments are replaced by cell type specific intermediate filament proteins, such as GFAP.

Applications Reported

This Rat-401 antibody has been reported for use in western blotting, immunohistochemical and immunocytochemical staining.

Applications Tested

This Rat-401 antibody has been tested by immunofluorescent staining of paraformaldehyde fixed and permeabilized cells. This can be used at less than or equal to 10 µg/ml. It is recommended that the antibody be titrated for optimal performance in the assay of interest.

References

Lindsley RC, Gill JG, Kyba M, Murphy TL, Murphy KM. Canonical Wnt signaling is required for development of embryonic stem cell-derived mesoderm. Development. 2006 Oct;133(19):3787-96 (Rat-401, ICC, PubMed)

Dubé M, Huot ME, Khandjian EW. Muscle specific fragile X related protein 1 isoforms are sequestered in the nucleus of undifferentiated myoblast. BMC Genet. 2000;1:4. (Rat-401)

Hockfield S, McKay RD. Identification of major cell classes in the developing mammalian nervous system.J Neurosci. 1985 Dec;5(12):3310-28. (Rat401, ICC, PubMed)

Related Products

11-4317 Streptavidin FITC
13-4013 Anti-Mouse IgG Biotin (Polyclonal)
14-9843 Anti-Human Nestin Purified (10C2)

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