Oligodendrocyte Marker O4 Antibody, Clone 81

Antibodies

Mouse monoclonal IgM antibody against human, mouse, rat oligodendrocyte marker O4,

unconjugated

Catalog #01416 50 µg 1 mg/mL



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Product Description

O-Antigens are expressed on the surface of oligodendrocytes in the central nervous system. O4 is formed during postnatal development and is a marker for cell bodies and processes of oligodendrocytes types I and II. O4 is expressed by pro-oligodendrocytes, however, it is not found on O-2A-progenitor cells. O4 can be used to detect oligodendrocytes in as early as day 3 cell cultures of brains from mouse embryos.

Target Antigen Name: Oligodendrocyte Marker O4

Alternative Names: Sulfatide Gene ID: 5010

Species Reactivity: Human, Mouse, Rat, Pig

Host Species: Mouse
Clonality: Monoclonal

Clone: 81 lgM

Immunogen: White matter homogenate obtained from the corpus callosum of bovine brain

Conjugate: Unconjugated

Applications

Verified: ICC

Reported: FACS, FC, ICC, IF, IHC

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 saline, pH 8.0, containing 0.05% sodium azide.

Purification: The antibody was purified by affinity chromatography.

Stability and Storage: Product stable at 2 - 8°C for up to 6 months when stored undiluted. Do not freeze. For product expiry date,

please contact techsupport@stemcell.com.

Directions for Use: Centrifuge tube briefly before use to ensure recovery of entire contents.

Dilute with medium or phosphate-buffered saline containing appropriate blocking serum. 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.

Antibodies

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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. Thanasupawat T et al. (2015) Platinum (IV) coiled coil nanotubes selectively kill human glioblastoma cells. Nanomedicine 11(4): 913–25. (ICC, IF, IHC)
- 2. Konig N et al. (2014) Murine neural crest stem cells and embryonic stem cell-derived neuron precursors survive and differentiate after transplantation in a model of dorsal root avulsion. J Tissue Eng Regen Med. doi: 10.1002/term.1893. (IHC)
- 3. Li Q et al. (2014) Production of healthy cloned pigs with neural stem cells as nuclear donors. Anim Biotechnol 25(4): 294-305. (ICC, IF)
- 4. Ebrahimi-Barough S et al. (2013) Programming of human endometrial-derived stromal cells (EnSCs) into pre-oligodendrocyte cells by overexpression of miR-219. Neurosci Lett 537: 65–70. (IF, ICC)
- 5. Coombs ID et al. (2012) Cornichons modify channel properties of recombinant and glial AMPA receptors. J Neurosci 32(29): 9796-804. (ICC, IF)
- 6. Tracy ET et al. (2011) Isolation and expansion of oligodendrocyte progenitor cells from cryopreserved human umbilical cord blood. Cytotherapy 13(6): 722–9. (FC)
- 7. Bambakidis NC et al. (2010) Intravenous hedgehog agonist induces proliferation of neural and oligodendrocyte precursors in rodent spinal cord injury. Neurosurgery 67(6): 1709–15. (ICC, IF)
- 8. Deleyrolle LP & Reynolds BA. (2009) Isolation, expansion, and differentiation of adult Mammalian neural stem and progenitor cells using the neurosphere assay. Methods Mol Biol 549: 91–101. (ICC, IF)
- 9. Louis SA et al. (2008) Enumeration of neural stem and progenitor cells in the neural colony-forming cell assay. Stem Cells 26(4): 988–96. (ICC, IF)
- 10. Kucia M et al. (2006) Cells enriched in markers of neural tissue-committed stem cells reside in the bone marrow and are mobilized into the peripheral blood following stroke. Leukemia 20(1): 18–28. (ICC, IF)

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