

PNS Myelin (pm43): sc-69895

BACKGROUND

Myelin, a structure composed of about 80% lipid fat and 20% protein, functions as an electrically-insulating phospholipid layer that encases neuronal axons, thereby increasing the speed at which electrical impulses travel across the axon. Myelinated neurons have a greater rate of regeneration and are able to hold their electrical current for a longer amount of time than unmyelinated neurons. Myelin is present in both the central nervous system (CNS), where it is produced by oligodendrocytes, and the peripheral nervous system (PNS), where it is produced by Schwann cells (also known as neurolemmocytes). Loss of the Myelin sheath (demyelination) can cause various symptoms, including double vision, speech disruption, loss of dexterity and heat sensitivity, and is associated with many neurological disorders, such as leukodystrophy and multiple sclerosis. Exploring the differences between CNS Myelin and PNS Myelin may provide insights into the pathogenesis of these idiopathic diseases.

REFERENCES

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SOURCE

PNS Myelin (pm43) is a mouse monoclonal antibody raised against Myelin isolated from the peripheral nervous system of human origin.

PRODUCT

Each vial contains 500 µl ascites containing IgM with < 0.1% sodium azide and 1% stabilizer protein.

APPLICATIONS

PNS Myelin (pm43) is recommended for detection of Myelin in the PNS of human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:10-1:200), immunofluorescence (starting dilution to be determined by researcher, dilution range 1:10-1:200) and immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:10-1:200); may cross-react with Myelin in the CNS.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.