

Store at
-20°C
#30728

Oligodendrocyte Marker Antibody Sampler Kit



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Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
Myelin Basic Protein (D8X4Q) XP® Rabbit mAb	78896	20 µl	12-18 kDa	Rabbit IgG
CNPase (D83E10) XP® Rabbit mAb	5664	20 µl	47 kDa	Rabbit IgG
PLP1 (E9V1N) Rabbit mAb	28702	20 µl	20-30 kDa	Rabbit IgG
MAG (D4G3) XP® Rabbit mAb	9043	20 µl	100 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The Oligodendrocyte Marker Antibody Sampler Kit provides an economical means of detecting proteins identified as oligodendrocyte markers by immunofluorescence and western blot.

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibodies.*

Background

Oligodendrocytes are the myelinating glial cells of the central nervous system (CNS) (1). Myelin basic protein (MBP) is an abundant CNS myelin membrane protein that plays an important role in nerve myelination. MBP helps to adhere the cytoplasmic leaflets of adjacent oligodendrocyte membranes to one another (2). CNPase (2', 3'-cyclic nucleotide 3'-phosphodiesterase) is an enzyme highly expressed in oligodendrocytes and accounts for roughly 4% of the total myelin protein in the CNS (3). CNPase binds to tubulin heterodimers and plays a role in tubulin polymerization, and oligodendrocyte process outgrowth (4). Myelin proteolipid protein (PLP1) corresponds to the majority of myelin proteins in the CNS, providing support to axons and modulating axonal growth (5). Myelin-associated glycoprotein (MAG) is localized in oligodendroglial membranes of myelin sheaths where it plays a role in interaction between axons and glia, and has been shown to promote axonal protective effects (6,7).

Background References

1. Bradl, M. and Lassmann, H. (2010) *Acta Neuropathol* 119, 37-53.
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6. Quarles, R.H. (2007) *J Neurochem* 100, 1431-48.
7. Nguyen, T. et al. (2009) *J Neurosci* 29, 630-7.

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