

Monoclonal Antibody to Human Myelin Basic Protein

Catalog No.:	BM018
Quantity:	0.2 mg
Concentration:	conc. Lot specific
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	V/h1
Immunogen:	N-terminal fragment of human MBP (residues 1-118) produced by BNPS-skatole cleavage of pure human MBP, injected coupled to BSA using carbodiimide.

Format: This antibody is supplied as liquid, Protein A affinity purified IgG in PBS pH 7.2 with sodium azide as preservative.

Applications: ELISA. RIA. Other applications not tested. Optimal dilutions of this antibody are dependent on conditions and should be determined by the user.
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Specificity: A group of 7 (or more) proteins produced from a single gene by alternate splicing found in central and peripheral nervous system myelin. The major basic protein (MBP) has long been of interest because it is the antigen, that, when injected into an animal, elicits a cellular immune response that produces the CNS autoimmune disease called experimental allergic encephalomyelitis (EAE), a T-lymphocyte mediated disease due to delayed-type hypersensitivity; though each species appears to respond to a different fragment of the 170 amino acid polypeptide. In the peripheral nervous system, myelin basic protein 18.5 kD is often referred to as the P1 protein. Myelin basic protein (MBP) isoforms (isoforms 4-14) are with PLP the most abundant protein components of the myelin membrane in the CNS and are involved in formation and stabilization. The smaller isoforms might have an important role in remyelination of denuded axons in multiple sclerosis. Isoforms 1-3/Golli-MBPs may have a role in the early developing brain long before myelination, perhaps as components of transcriptional complexes, and may also be involved in signaling pathways in T-cells and neural cells. Differential splicing and post-translational modifications give a wide spectrum of isomers. Myelin basic protein is expressed in oligodendrocytes, myelin of white matter in the brain and spinal cord and in peripheral nerves. It is expressed less abundantly in grey matter. Recognizes predominantly residues 92-118. Reacts with pure MBP from sheep, rabbit, guinea-pig, and bovine sources.

Storage: Aliquot an

General Readings: Elfman et al (1986) J.Neurochem. 46 509-515