

Anti-Myelin Basic Protein Antibody

Catalog # ABO10536

Product Information

Application	WB, IHC-P
Primary Accession	P02686
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Myelin basic protein(MBP) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	4155
Other Names	Myelin basic protein, MBP, Myelin A1 protein, Myelin membrane encephalitogenic protein, MBP
Calculated MW	33117
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Mouse, Rat, Human, By Heat Western blot, 0.1-0.5 μ g/ml, Human, Mouse, Rat
Subcellular Localization	Myelin membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic side of myelin.
Tissue Specificity	MBP isoforms are found in both the central and the peripheral nervous system, whereas Golli-MBP isoforms are expressed in fetal thymus, spleen and spinal cord, as well as in cell lines derived from the immune system. .
Source	Eukaryota
Protein Name	Myelin basic protein(MBP)
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Myelin Basic Protein(182-197aa KLGGDRSGSPMARR), identical to the related rat and mouse sequences.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the myelin basic protein family.

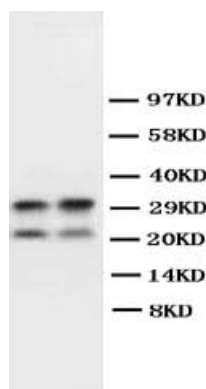
Protein Information

Name	MBP
Function	The classic group of MBP isoforms (isoform 4-isoform 14) are with PLP the most abundant protein components of the myelin membrane in the CNS. They have a role in both its formation and stabilization. The smaller isoforms might have an important role in remyelination of denuded axons in multiple sclerosis. The non-classic group of MBP isoforms (isoform 1-isoform 3/Golli-MBPs) may preferentially have a role in the early developing brain long before myelination, maybe as components of transcriptional complexes, and may also be involved in signaling pathways in T-cells and neural cells. Differential splicing events combined with optional post-translational modifications give a wide spectrum of isomers, with each of them potentially having a specialized function. Induces T-cell proliferation.
Cellular Location	Myelin membrane; Peripheral membrane protein; Cytoplasmic side. Note=Cytoplasmic side of myelin
Tissue Location	MBP isoforms are found in both the central and the peripheral nervous system, whereas Golli-MBP isoforms are expressed in fetal thymus, spleen and spinal cord, as well as in cell lines derived from the immune system.

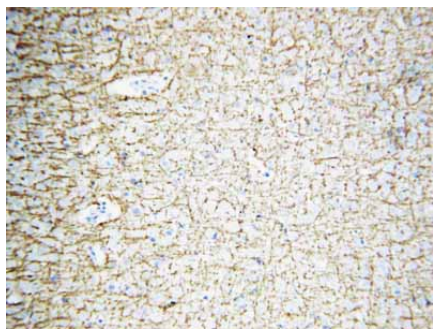
Background

Myelin basic protein (MBP) is a major constituent of the myelin sheath of oligodendrocytes and Schwann cells in the central nervous system and the peripheral nervous system, respectively. It is most abundant in hemopoietic system and contains seven exons distributed over 32-34 kb. MBP isolated from MS brain may differ in charge microheterogeneity which would affect antigenic determinants. MBP is mapped to chromosome 18q22-23. Failure in this gene expression would be correlated in the central white matter with extrapyramidal system degeneration signs. Moreover, it is a candidate autoantigen in the disease multiple sclerosis.

Images



Anti-Myelin Basic Protein antibody, ABO10536, Western blottingWB: Mouse Brain Tissue Lysate



Anti-Myelin Basic Protein antibody, ABO10536,
IHC(P)IHC(P): Rat Brain Tissue

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