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Anti-Myelin Basic Protein Antibody

Catalog # ABO10536

Specification

Anti-Myelin Basic Protein Antibody - 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.

Anti-Myelin Basic Protein Antibody - Additional Information

Gene ID 4155

Other Names
Myelin basic protein, MBP, Myelin A1 protein, Myelin membrane encephalitogenic protein, MBP

Calculated MW
33117 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, Human, By Heat
Western blot, 0.1-0.5 µg/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. .

Protein Name
Myelin basic protein(MBP)

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human Myelin Basic Protein(182-197aa KLGGRDSRSGSPMARR), 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 r˚Constitution, 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.

Anti-Myelin Basic Protein Antibody - 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.

Anti-Myelin Basic Protein Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Myelin Basic Protein Antibody - Images

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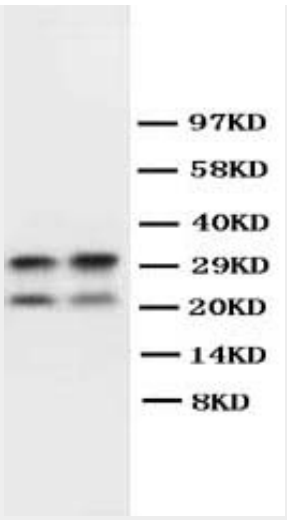
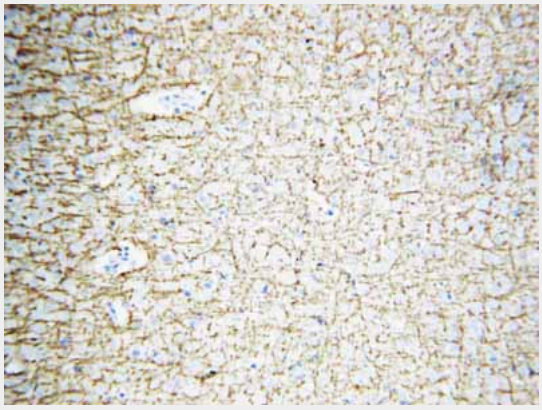


Anti-Myelin Basic Protein antibody, ABO10536, Western blottingWB: Mouse Brain Tissue Lysate



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

Anti-Myelin Basic Protein Antibody - 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.