

**Anti-Myelin Basic Protein Antibody**  
**Catalog # ABO10536****Specification**

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**Anti-Myelin Basic Protein Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P02686</a>
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<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

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

**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

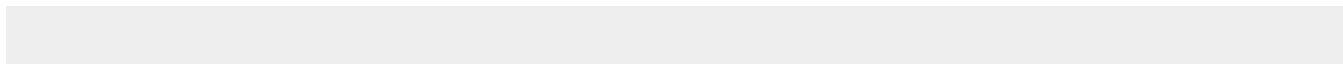
**Tissue Location**

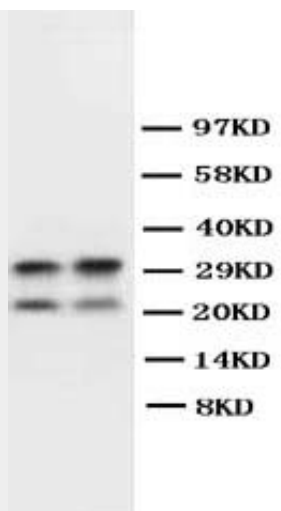
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**Anti-Myelin Basic Protein Antibody - Protocols**

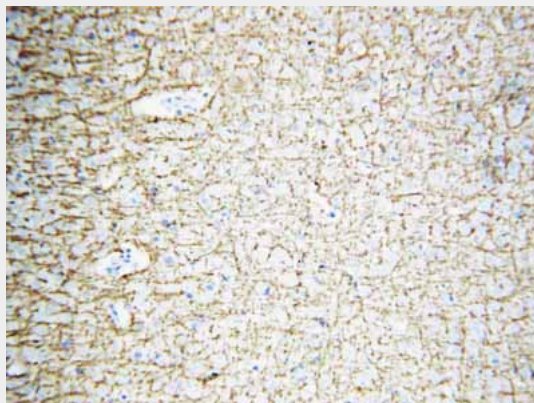
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Myelin Basic Protein Antibody - 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

### 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.