

### MBP Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1178a

## Specification

## MBP Antibody - Product Information

Application Primary Accession Host Clonality Isotype Description

WB, E <u>P02686</u> Mouse Monoclonal IgG1

Epitope tagging offers an easy and universal strategy for the identification and purification of proteins derived by recombinant DNA technology. The insertion of a Maltose Binding Protein (MBP) tag creates a stable fusion product that does not interfere with the bioactivity of the protein or with the biodistribution of the MBP tagged product. Cleavage by factor Xa separates MBP from its partner protein.

Immunogen Recombinant fusion protein with Maltose binding protein tag. <br />

**Formulation** Ascitic fluid containing 0.03% sodium azide. <br />

## MBP Antibody - Additional Information

Gene ID 4155

Dilution WB~~1/500 - 1/2000 E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MBP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **MBP 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.

### **MBP Antibody - Protocols**

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### MBP Antibody - Images



Figure 1: Western blot analysis using MBP mouse mAb against various fusion protein with MBP tag.

# MBP Antibody - References

1. J Immunol Methods. 1997 May 26;204(2):169-74. 2. J Biomed Sci. 2001 Mar-Apr;8(2):170-5.