

**MBP Monoclonal Antibody**  
**Mouse Monoclonal Antibody**  
**Catalog # ABV11743****Specification**

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**MBP Monoclonal Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P04370</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>Mouse IgG</b>
Calculated MW	<b>27168</b>

**MBP Monoclonal Antibody - Additional Information****Gene ID** 17196

Application & Usage	<b>Western blot</b>
Alias Symbol	<b>Mbp</b>
<b>Other Names</b>	
Myelin A1 protein, Myelin membrane encephalitogenic protein	

**Appearance**  
Colorless liquid**Formulation**  
100 ug (1mg/ml) of antibody in 0.01M Tris-HCl, pH 8.0, 0.15M NaCl, and 0.02% sodium azide.**Reconstitution & Storage**  
-20 °C**Background Descriptions****Precautions**  
MBP Monoclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.**MBP Monoclonal Antibody - Protein Information****Name** Mbp**Synonyms** Shi**Function**  
The classic group of MBP isoforms (isoform 4-isoform 13) 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 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 to optional post-translational modifications give a wide spectrum of isomers, with each of them potentially having a specialized function.

#### **Cellular Location**

[Isoform 13]: Myelin membrane; Peripheral membrane protein; Cytoplasmic side [Isoform 11]: Myelin membrane; Peripheral membrane protein; Cytoplasmic side [Isoform 9]: Myelin membrane; Peripheral membrane protein; Cytoplasmic side [Isoform 7]: Myelin membrane; Peripheral membrane protein; Cytoplasmic side [Isoform 5]: Myelin membrane; Peripheral membrane protein; Cytoplasmic side [Isoform 3]: Cytoplasm. Nucleus. [Isoform 1]: Cytoplasm. Nucleus.

#### **Tissue Location**

In the embryo, isoform 1-isoform 3 are found in neurons within the central nervous system (primarily in pioneer neurons important in the formation of the cortex) and the peripheral nervous system. They are also expressed in the thymus, gut, lung and kidney. In the adult, isoform 1-isoform 3 are highly expressed in the brain (mainly in brain regions rich in oligodendrocytes) and spleen. Lower levels are seen in the heart, kidney and lung. Isoform 2 is also found in cells of the immune system. The isoforms missing the 134 first amino acids (isoform 4-isoform 13) are almost exclusively produced in the myelin-forming cells, the mature oligodendrocytes

#### **MBP Monoclonal 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](#)

#### **MBP Monoclonal Antibody - Images**

#### **MBP Monoclonal Antibody - Background**

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.