

MBP Monoclonal Antibody

Mouse Monoclonal Antibody

Catalog # ABV11743

Product Information

Application	WB
Primary Accession	P04370
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG
Calculated MW	27168

Additional Information

Gene ID	17196
Application & Usage	Western blot
Alias Symbol	Mbp
Other Names	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.

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

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.