

Anti-Myelin Basic Protein (MBP) Antibody

Our Anti-Myelin Basic Protein (MBP) primary antibody from PhosphoSolutions is chicken polyclonal. It
Catalog # AN1461

Specification

Anti-Myelin Basic Protein (MBP) Antibody - Product Information

Application	WB, IHC
Primary Accession	P02688
Reactivity	Bovine, Chicken
Host	Chicken
Clonality	Polyclonal
Isotype	IgY
Calculated MW	21502

Anti-Myelin Basic Protein (MBP) Antibody - Additional Information

Gene ID **24547**

Other Names

GDB antibody, Golli MBP antibody, Golli MBP myelin basic protein antibody, Hemopoietic MBP antibody, HMBPR antibody, HUGO antibody, MBP antibody, MBP_CAVPO antibody, MBP_HUMAN antibody, MGC99675 antibody, MLD antibody, Myelin A1 protein antibody, Myelin A1 Protein basic antibody, Myelin basic protein antibody, Myelin Deficient antibody, Myelin membrane encephalitogenic protein antibody, OTTHUMP00000163776 antibody, OTTHUMP00000174387 antibody, OTTHUMP00000174388 antibody, SHI antibody, Shiverer antibody, SP antibody

Target/Specificity

Myelin Basic Protein (MBP) is one of the major proteins of the myelin sheath surrounding axons in the nervous system. Since it is of relatively low molecular weight and high abundance the protein sequence was determined from purified protein over 30 years ago (Eylar et al., 1971). The protein is made by oligodendrocytes in the central nervous system, so antibodies to MBP are good markers of this cell type. However, transcripts from the same gene are also expressed in certain hematopoietic lineage cells (Marty et al., 2002). In the central nervous system there are there different forms of the protein made by alternate transcription from a single gene, which have molecular weights of 21.5, 18.5, and 17.2 kDa. Since the two lower molecular weight forms are very close in molecular size, MBP antibodies typically show two bands on Western blots, one at about 22 kDa and another at about 18 kDa.

Dilution

WB~~1:1000
IHC~~1:100~500

Format

Total IgY fraction

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

Anti-Myelin Basic Protein (MBP) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

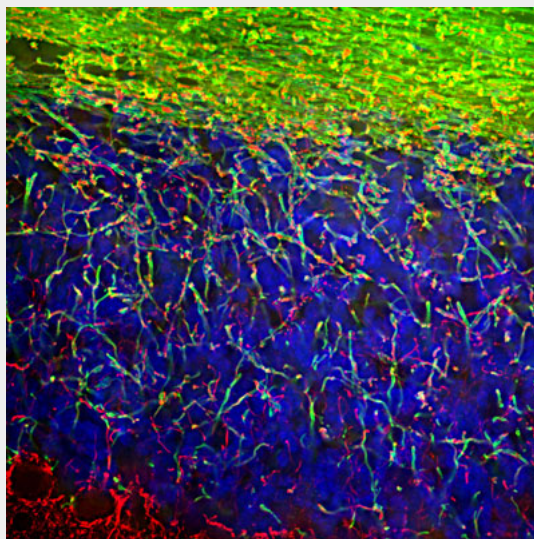
Shipping

Blue Ice

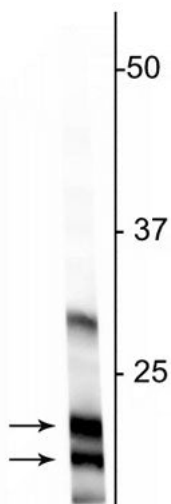
Anti-Myelin Basic Protein (MBP) Antibody - Protocols

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

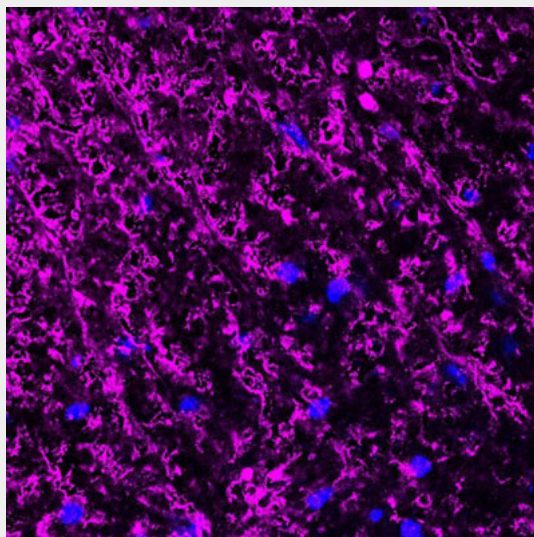
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Myelin Basic Protein (MBP) Antibody - Images

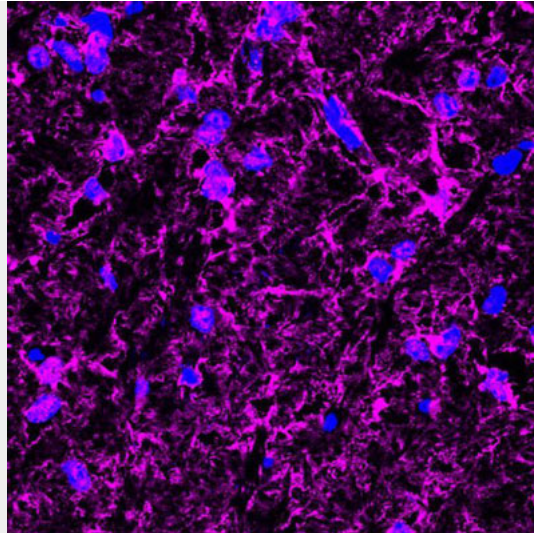
Immunofluorescence of a section of rat cerebellum showing specific labeling of myelin basic protein (cat. 1120-MBP, 1:5000, green) in the oligodendrocytes and myelin sheaths around axons. The section is colabeled with Anti-NFL (red) labeling dendrites and axons of neuronal cells. The blue stains nuclear DNA.



Western blot of rat cortical lysate showing specific immunolabeling of the ~18 kDa and ~22 kDa MBP protein.



Immunofluorescence of a perpendicular section from mouse spinal cord gray matter (upper left corner) and white matter (lower right corner) labeling myelin basic protein (cat. :1120-MBP, magenta, 1:500) from oligodendrocytes and myelin sheaths. The blue is DAPI counterstaining nuclear DNA. Image kindly provided by Dr. Rodolfo Gatto and Dr. Gerardo Morfini, Department of Anatomy and Cell biology, University of Illinois at Chicago.



Immunofluorescence of a cross-section from mouse corpus callosum labeling myelin basic protein (cat. : 1120-MBP, magenta, 1:500) in oligodendrocytes and myelin sheaths. The blue is DAPI counterstaining nuclear DNA. Image kindly provided by Dr. Rodolfo Gatto and Dr. Gerardo Morfini, Department of Anatomy and Cell biology, University of Illinois at Chicago.

Anti-Myelin Basic Protein (MBP) Antibody - Background

Myelin Basic Protein (MBP) is one of the major proteins of the myelin sheath surrounding axons in the nervous system. Since it is of relatively low molecular weight and high abundance the protein sequence was determined from purified protein over 30 years ago (Eylar et al., 1971). The protein is made by oligodendrocytes in the central nervous system, so antibodies to MBP are good markers of this cell type. However, transcripts from the same gene are also expressed in certain hematopoietic lineage cells (Marty et al., 2002). In the central nervous system there are three different forms of the protein made by alternate transcription from a single gene, which have molecular weights of 21.5, 18.5, and 17.2 kDa. Since the two lower molecular weight forms are very close in molecular size, MBP antibodies typically show two bands on Western blots, one at about 22 kDa and another at about 18 kDa.