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Myelin Basic Protein (MBP) Antibody
Chicken polyclonal antibody
Catalog # AN1200

Specification

Myelin Basic Protein (MBP) Antibody - Product Information

Application	**WB, IF**
Primary Accession	P02688
Reactivity	**Bovine, Human, Mouse, Rat**
Host	**Chicken**
Clonality	**polyclonal**
Calculated MW	**18/22 KDa**

Myelin Basic Protein (MBP) Antibody - Additional Information

Gene ID	**24547**
Gene Name	**MBP**

Other Names
Myelin basic protein, MBP, Mbp

Target/Specificity
Three peptide sequences conserved in higher vertebrate MBP proteins.

Dilution
WB~~ 1:5000
IF~~ 1:500

Format
Total IgY fraction.

Antibody Specificity
Specific for the ~18k & 22k myelin basic protein in Western blots of ratbrain homogenate

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

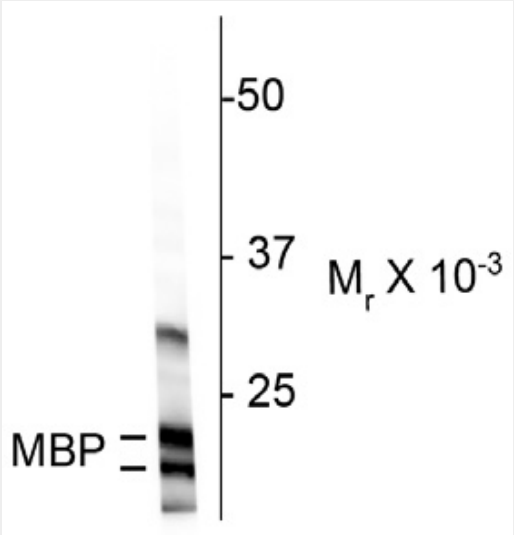
Shipping
Blue Ice

Myelin Basic Protein (MBP) Antibody - Protocols

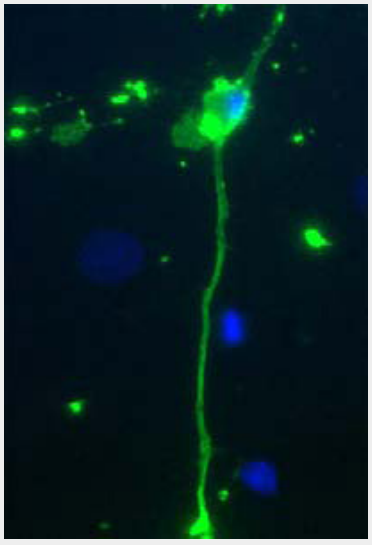
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Myelin Basic Protein (MBP) Antibody - Images



Western blot of rat cortex homogenate showing specific immunolabeling of the ~ 18& 22k MBP protein.



Rat mixed neuron/glial cultures stained with chicken anti-MyelinBasic Protein (green). Blue is a DNA stain. Note that the Myelin Basic Protein antibody stainsan oligodendrocyte and some membrane shed from this cell. Other cells in the field includeneurons, astrocytes, microglia and fibroblasts, all of which are completely negative.

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 hematopoetic 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 22kDa and another at about 18kDa.

Myelin Basic Protein (MBP) Antibody - References

Eylar EH, Brostoff S, Hashim G, Caccam J, Burnett P. (1971) Basic A1 protein of the myelin membrane: the complete amino acid sequence. J. Biol. Chem. 246:5770-5784.
Marty MC, Alliot F, Rutin J, Fritz R, Trisler D. and Pessac B. (2002) The myelin basic protein gene is expressed in differentiated blood cell lineages and in hematopoietic progenitors. Proc. Nat. Acad. Sci. 99:8856-8861.