

## Phospho-MBP(Y203) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3556a

### Specification

## Phospho-MBP(Y203) Antibody - Product Information

Application	DB,E
Primary Accession	<u>P02686</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	33117

## Phospho-MBP(Y203) Antibody - Additional Information

#### Gene ID 4155

**Other Names** Myelin basic protein, MBP, Myelin A1 protein, Myelin membrane encephalitogenic protein, MBP

Target/Specificity

This MBP Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y203 of human MBP.

Dilution

DB~~1:500

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

Phospho-MBP(Y203) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Phospho-MBP(Y203) 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.

## Phospho-MBP(Y203) Antibody - Protocols

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

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

### Phospho-MBP(Y203) Antibody - Images



Dot blot analysis of anti-Phospho-MBP-Y203 Antibody (Cat.#AP3556a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

### Phospho-MBP(Y203) Antibody - Background

Myelin basic protein (MBP) is a protein believed to be important in the process of myelination of nerves in the central nervous system (CNS). The pool of MBP in the central nervous system is very



diverse, with several splice variants being expressed and a large number of post-translational modifications on the protein, which include phosphorylation, methylation, deamidation and citrullination.

### Phospho-MBP(Y203) Antibody - References

Kawamura,K., J. Immunol. 181 (5), 3202-3211 (2008) Majava,V., BMC Struct. Biol. 8, 10 (2008) Boylan,K.B.,Genomics 6 (1), 16-22 (1990)