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Phospho-MBP(Y203) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3556a

Product Information

Application	DB, E
Primary Accession	P02686
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15524
Calculated MW	33117

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.

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.

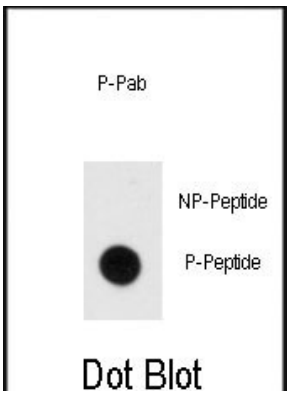
Background

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.

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)

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.