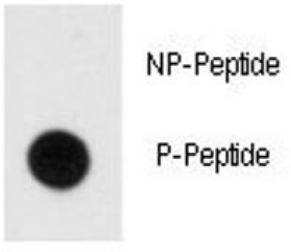
Phospho-MBP (pY203) Antibody / Phospho-Myelin Basic Protein Antibody (F48570)

Catalog No.	Formulation	Size
F48570-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48570-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P02686
Applications	Dot blot: 1:500
Limitations	This Phospho-MBP (pY203) Antibody / Phospho-Myelin Basic Protein Antibody is available for research use only.



Phospho-MBP (pY203) Antibody Specificity Dot Blot. Dot blot testing of Phospho-MBP (pY203) Antibody / Phospho-Myelin Basic Protein Antibody using 50 ng per dot of phosphorylated MBP peptide and the corresponding non-phosphorylated peptide. Preferential recognition of the phosphopeptide demonstrates phosphorylation-dependent detection of MBP at Tyr203. This Phospho-MBP Antibody supports research into site-specific MBP phosphorylation and myelin regulation.

Description

Phospho-MBP (pY203) Antibody / Phospho-Myelin Basic Protein Antibody detects myelin basic protein (MBP) phosphorylated at tyrosine 203. MBP is a major structural component of the myelin sheath and contributes to the formation, compaction and stability of myelin membranes in the central nervous system (CNS). MBP is produced primarily by oligodendrocytes and is extensively studied in neuroscience because of its central role in myelin organization and nervous system function.

MBP is a highly basic protein that associates with the cytoplasmic surfaces of myelin membranes, where its interactions with membrane lipids help maintain the closely apposed layers of compact myelin. The MBP protein population is highly diverse due to alternative splicing and numerous post-translational modifications. These modifications include phosphorylation, methylation, deamidation and citrullination and can alter the biochemical properties and molecular interactions of MBP.

Phosphorylation provides an additional level of regulation beyond total MBP expression. Site-specific phosphorylation can influence protein charge, conformation and interactions, making phospho-MBP an important target for studies examining how signaling events relate to myelin organization and oligodendrocyte biology. A Phospho-Myelin Basic Protein Antibody enables phosphorylation at a defined residue to be investigated separately from changes in overall MBP abundance.

This rabbit polyclonal antibody was generated against a KLH-conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding pY203 of human MBP. The antibody is antigen affinity purified and has been validated for human reactivity by dot blot. Specificity testing compared 50 ng of phosphorylated peptide with the corresponding non-phosphorylated peptide, providing direct evaluation of phosphorylation-dependent recognition at this site.

NSJ Bioreagents supplies phospho-specific antibodies for research into protein regulation and cell signaling. A Phospho-MBP (pY203) Antibody can be used to investigate site-specific MBP phosphorylation in studies of myelin regulation, oligodendrocyte biology and signaling mechanisms associated with CNS myelin.

For broader research on myelin structure and MBP expression, see our Myelin Basic Protein Antibody / CNS Myelin Marker page.

Application Notes

Titration of the Phospho-MBP (pY203) Antibody / Phospho-Myelin Basic Protein Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This Phospho-MBP (pY203) Antibody was produced from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding pY203 of human MBP.

Storage

Aliquot the Phospho-MBP (pY203) Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Phospho-MBP pY203 antibody, Phospho-Myelin Basic Protein antibody, MBP phospho-Tyr203 antibody, Myelin Basic Protein pY203 antibody

Copyright © NSJ Bioreagents. All rights reserved.