

# Anti-Myelin Basic Protein (region Thr98) [98/P12]

**Catalogue number:** 153644

**Sub-type:** Primary antibody

**Images:**

## Contributor

**Inventor:**

**Institute:** BioServ UK Ltd

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** Anti-Myelin Basic Protein (region Thr98) [98/P12]

**Alternate name:** Myelin basic protein, MBP, 2 kDa microtubule-stabilizing protein, Myelin A1 protein

**Class:** Monoclonal

**Conjugate:** Unconjugated

**Description:** The phosphorylation of myelin basic protein (MBP) has been shown to decrease the ability of MBP to aggregate lipid vesicles and consequently destabilising the compact structure of myelin, a destruction that has been observed in demyelinating diseases such as Multiple Sclerosis. (Yon, M et al. 1995) Clone 98/P12 is a useful detector of phosphorylated MBP by binding to Thr98 of human MBP in the phosphorylated state.

**Purpose:** Marker

**Parental cell:**

**Organism:**

**Tissue:**

**Model:**

**Gender:**

**Isotype:** IgG2a

**Reactivity:** Human

**Selectivity:**

**Host:** Mouse

**Immunogen:** Synthetic peptide corresponding to human MBP when phosphorylated at threonine 98

**Immunogen UNIPROT ID:**

**Sequence:**

**Growth properties:**

**Production details:**

**Formulation:**

**Recommended controls:** Brain tissue

**Bacterial resistance:**

**Selectable markers:**

**Additional notes:**

## Target details

**Target:** Myelin Basic Protein (region Thr98)

**Target alternate names:**

**Target background:** The phosphorylation of myelin basic protein (MBP) has been shown to decrease the ability of MBP to aggregate lipid vesicles and consequently destabilising the compact structure of myelin, a destruction that has been observed in demyelinating diseases such as Multiple Sclerosis. (Yon, M et al. 1995) Clone 98/P12 is a useful detector of phosphorylated MBP by binding to Thr98 of human MBP in the phosphorylated state.

**Molecular weight:** 13-21 kDa

**Ic50:**

## Applications

**Application:** ELISA ; WB

**Application notes:**

## Handling

**Format:** Liquid

**Concentration:**

**Passage number:**

**Growth medium:**

**Temperature:**

**Atmosphere:**

**Volume:**

**Storage medium:**

**Storage buffer:**

**Storage conditions:**

**Shipping conditions:** Shipping at 4° C

## Related tools

**Related tools:**

## References

**References:** Grigoletto et al. 2017. *Acta Neuropathol Commun.* 5(1):37. PMID: 28482862. ; Higher levels of myelin phospholipids in brains of neuronal  $\alpha$ -Synuclein transgenic mice precede myelin loss. ; Friess et al. 2016. *Cell Calcium.* 60(5):322-330. PMID: 27417499. ; Friess et al. 2016. *Cell Calcium.* 60(5):322-330. PMID: 27417499. ; Fernandes et al. 2016. *J Control Release.* 238:300-310. PMID: 27369863. ; Isoda et al. 2016. *Neurosci Res.* 110:18-28. PMID: 27083781. ; Lim et al. 2016. *Antioxidants (Basel).* 5(3):. PMID: 27618111. ; Protandim Protects Oligodendrocytes against an Oxidative Insult. ; Intracellular ion signaling influences myelin basic protein synthesis in oligodendrocyte precursor cells. ; Part II: Fn delivery of a neurotherapeutic gene to neural stem cells using minicircle DNA and nanoparticles: Translational advantages for regenerative neurology. ; Robust production of human neural cells by establishing neuroepithelial-like stem cells from peripheral blood mononuclear cell-derived feeder-free iPSCs under xeno-free conditions. ; Crawford et al. 2016. *Am J Pathol.* 186(3):511-6. PMID: 26773350. ; Pre-Existing Mature Oligodendrocytes Do Not Contribute to Remyelination following Toxin-Induced Spinal Cord Demyelination. ; Natrajan et al. 2015. *Brain.* 138(Pt 12):3581-97. PMID: 26463675. ; Retinoid X receptor activation reverses age-related deficiencies in myelin debris phagocytosis and remyelination. ; HDAC1/2-Dependent P0 Expression Maintains Paranodal and Nodal Integrity Independently of Myelin Stability through Interactions with Neurofascins. ; SncRNA715 Inhibits Schwann Cell Myelin Basic Protein Synthesis. ; Meade et al. 2015. *Brain Res.* 1611:101-13. PMID: 25842371. ; Quantitative proteomic analysis of the brainstem following lethal sarin exposure. ; Brgger et al. 2015. *PLoS Biol.* 13(9):e1002258. PMID: 26406915. ; Miller et al. 2015. *PLoS One.* 10(8):e0136900. PMID: 26317513. ; Pusic et al. 2014. *J Neuroimmunol.* 266(1-2):12-23. PMID: 24275061. ; IFN $\gamma$ -stimulated dendritic cell exosomes as a potential therapeutic for remyelination. ; Horiuchi et al. 2012. *Neurobiol Aging.* 33(3):499-509. PMID: 20594620. ; Time-lapse imaging of the dynamics of CNS glial-axonal interactions in vitro and ex vivo. ; Ioannidou et al. 2012. *PLoS One.* 7(1):e30775. PMID: 22303455. ; Monk et al. 2011. *Development.* 138(13):2673-80. PMID: 21613327. ; Gpr126 is essential for peripheral nerve development and myelination in mammals. ; Pohl et al. 2011. *J Neurosci.* 31(3):1069-80. PMID: 21248132. ; Genetically induced adult oligodendrocyte cell death is associated with poor myelin clearance, reduced remyelination, and axonal damage. ; Savvaki et al. 2010. *J Neurosci.* 30(42):13943-54. PMID: 20962216. ; The expression of TAG-1 in glial cells is sufficient for the formation of the juxtaparanodal complex and the phenotypic rescue of tag-1 homozygous mutants in the CNS. ; Amyloid  $\beta$ 1-42 oligomer inhibits myelin sheet formation in vitro. ; Kawai et al. 2009. *Eur J Neurosci.* 30(11):2030-41. PMID: 20128842. ; Maintenance of the relative proportion of oligodendrocytes to axons even in the absence of BAX and BAK. ; Relucio et al. 2009. *J Neurosci.* 29(38):11794-806. PMID: 19776266. ; Laminin alters fyn regulatory mechanisms and promotes oligodendrocyte development. ; Homchaudhuri et al. 2009. *Biochemistry.* 48(11):2385-93. PMID: 19178193. ; Influence of membrane surface charge and post-translational modifications to myelin basic protein on its ability to tether the Fyn-SH3 domain to a membrane in vitro. ; Matsuo et al. 1997. *Am J Pathol.* 150(4):1253-66. PMID: 9094982. ; Unmasking of an unusual myelin basic protein epitope during the process of myelin degeneration in humans: a potential mechanism for the generation of autoantigens. ; Groome et al. 1988. *J Neuroimmunol.* 19(4):305-15. PMID: 2459156. ; New monoclonal antibodies reactive with defined sequential epitopes in human myelin basic protein. ; Hruby et al. 1987. *Mol Immunol.* 24(12):1359-64. PMID: 2448611. ; Monoclonal antibodies reactive

with myelin basic protein. ; Groome et al. 1986. J Neuroimmunol. 12(4):253-64. PMID: 2428830. ;  
Region-specific immunoassays for human myelin basic protein. ; Elfman et al. 1986. J Neurochem.  
46(2):509-15. PMID: 2416877. ; Rat and mouse monoclonal antibodies to human myelin basic protein.

CancerTools.org