

Datasheet

Anti-MBP Clone 98/P12

Product Name	Anti MBP (pThr98) 98/P12
Catalogue Number	98/P12
Clone, Isotype	98P/12, IgG2a
Format	IgG
Tested Applications	WB, ICC, ELISA

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.

Product Details:

Form in stock: IgG, purified – 1.0 mg/mL. Also available as unpurified supernatant.

Host: Mouse

Specificity: Synthetic peptide corresponding to human MBP when phosphorylated at threonine 98.

Human Histology positive control: Brain tissue

Fusion partner: Spleen cells from immunised Balb/c mice were fused with the mouse SP2/0 myeloma cell line.

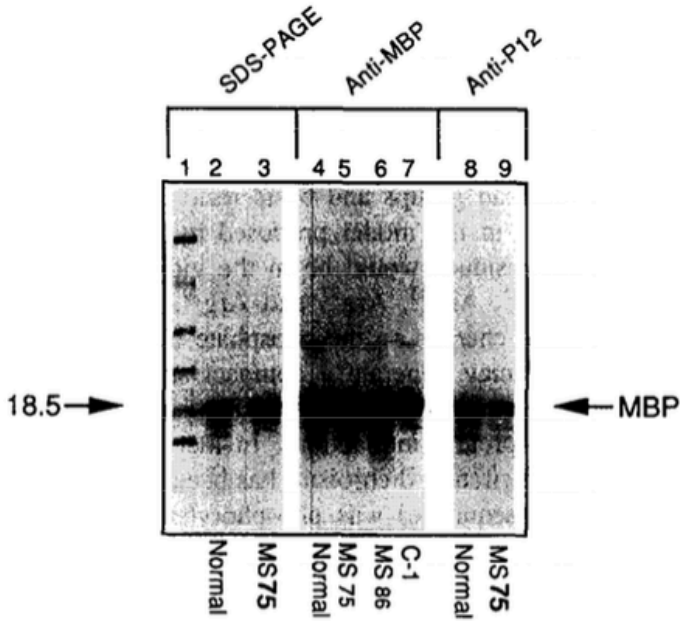
Storage: Store at +4°C or -20°C. Avoid repeated freezing and thawing.

Shelf life: 18 months from date of dispatch.

Regulatory/ Restrictions: For research and commercial purposes..

Applications	Suggested Dilution
Western Blot	1:1000-1:2000 ¹⁻⁴
Immunocytochemistry	1:400 ²
ELISA	Assay dependent

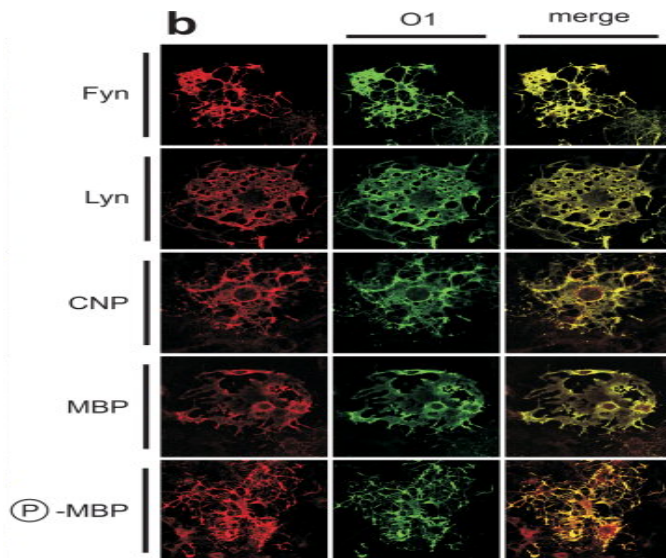
Applications:



Clone 98/P12 used to detect MBP in brain tissue of normal and MS patients by **Western Blot**

Image caption: ...Western Blot reacted with mAb P12. Lane 8, normal; lane 9, MS 75. (Yon, M et al. 1996)

Dilution used: 1:2000

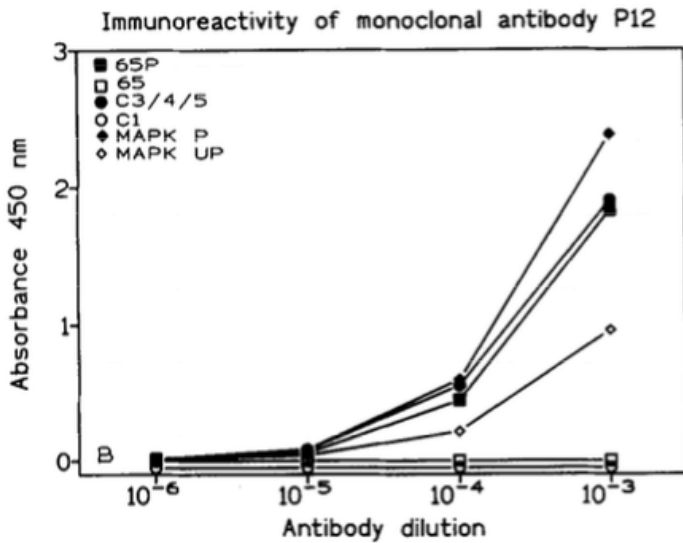


Clone 98/P12 used to stain OL cells and detect MBP levels by **ICC**

Image caption: Colocalization of various lipids and proteins in the developing oligodendrocyte...

b: Mature oligodendrocytes fixed at 15 DIV. (DeBruin, L.S et al. 2005)

Dilution used: 1:400



ELISA using clone 98/P12 to test its immunoreactivity against synthetic peptides and proteins
(Yon, M et al. 1995)

References:

1. Yon, M., Ackerley, C.A., Mastronardi, F.G., Groome, N.P., Moscarello, M.A. (1996) Identification of a mitogen-activated protein kinase site in human myelin basic protein in situ. *Journal of Neuroimmunology*, Volume 65, Issue 1, Pages 55-59, ISSN 0165-5728.
2. DeBruin, L.S., Haines, J.D., Wellhauser, L.A., Radeva, G., Schonmann, V., Bienzle, D. and Harauz, G. (2005) Developmental partitioning of myelin basic protein into membrane microdomains. *Journal of Neuroscience Research*, 80: 211-225. **Also uses WB, Dilution 1:2000**
3. Debruin, L.S., Haines, J.D., Bienzle, D., Harauz, G. (2006) Partitioning of myelin basic protein into membrane microdomains in a spontaneously demyelinating mouse model for multiple sclerosis. *Biochemistry and Cell Biology* 84.6, 993-1005. **WB, Dilution used 1:1000**
4. Atkins, C.M., Yon, M., Groome, N.P., Sweatt, J.D. (1999) Regulation of Myelin Basic Protein Phosphorylation by Mitogen-Activated Protein Kinase During Increased Action Potential Firing in the Hippocampus. *Journal of Neurochemistry*, 73: 1090-1097. **WB, Dilution used 1:2000**
5. Yon, M., White, P. Goome, N.P. (1995) Preparation of a novel monoclonal antibody specific for myelin basic protein phosphorylated on Thr98. *Journal of Neuroimmunology*, Volume 58, Issue 2, Pages 121-129, ISSN 0165-5728. **ELISA**