Datasheet

Anti-MBP Clone 40

Product Name	Anti Human MBP 40
Catalogue Number	MBP40
Clone, Isotype	MBP 40, IgG2a
Format	IgG
Tested Applications	WB, IHC, ELISA, IF, ICC

Description:
Myelin Basic Protein (MBP) is involved in the process of myelination of nerves in the nervous system. MBP Clone 40 is used in clinical diagnostics to detect MBP levels or myelination in human MBP. MBP 40 is used in a two-site ELISA with clone MBP 12. Both are used interchangeably as capture and detection antibody.

Product Details:

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

Host: Rat

Specificity: Epitope unknown.

Fusion partner: Spleen cells from an immunised outbred rat were fused with cells of the mouse NS0 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	1:100-1:2,000
Immunohistochemistry – Paraffin and Frozen	1:10-1:500
ELISA	1:100-1:2,000
Immunofluorescence	1:10-1:500
Immunocytochemistry	1:5-1:1000

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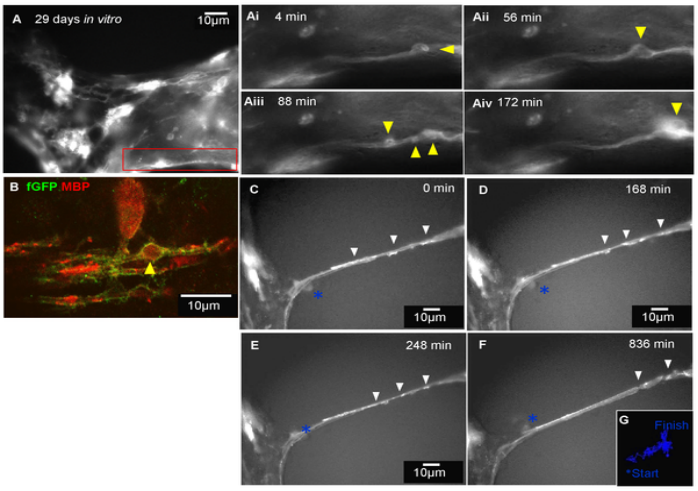
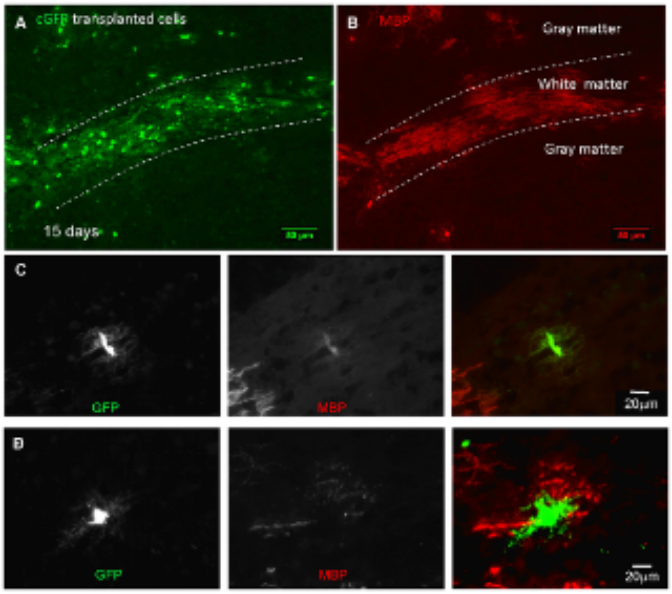
Applications:

Clone MBP 12 used to detect myelinated structures in MS plaques by **IHC-P**
Image caption: Serial sections of paraffin-embedded MS tissue immunostained with anti-EP(A), clone26(B), clone2(C), clone14(D), clone12(E), or clone22(F) .Notice that only abnormal myelin tissues strongly stained by anti-EP, whereas all other antibodies strongly stain the normal myelin surrounding the plaque area. See Materials and Methods for details. (Matsuo, A et al.)
Dilution used: 1:100,000



Clone 12 used to detect MBP in myelinating cell cultures using **Immunofluorescence**
Image caption: Time-lapse imaging of the putative assembly of myelin membrane. B) The cells from the Petri dish imaged with confocal microscopy were immunostained with anti-GFP and anti-MBP to confirm differentiation of cyto-GFP labelled oligodendrocytes. (Ioannidou, K et al.)
Dilution used: 1:500



Clone 12 used to detect MBP in myelinating cell cultures using **Immunofluorescence**
Image caption: Immunohistochemistry of transplanted neurospheres demonstrate that cyto-GFP labelled cells form early and mature myelinating oligodendrocytes.
Cyto-GFP-expressing neurospheres were transplanted into a *shiverer* mouse 3, 7 or 15 days post-transplantation, and 10 µm thick frozen sections were cut and immunolabelled with antibodies to GFP and MBP (Ioannidou, K et al.)
Dilution used: 1:500

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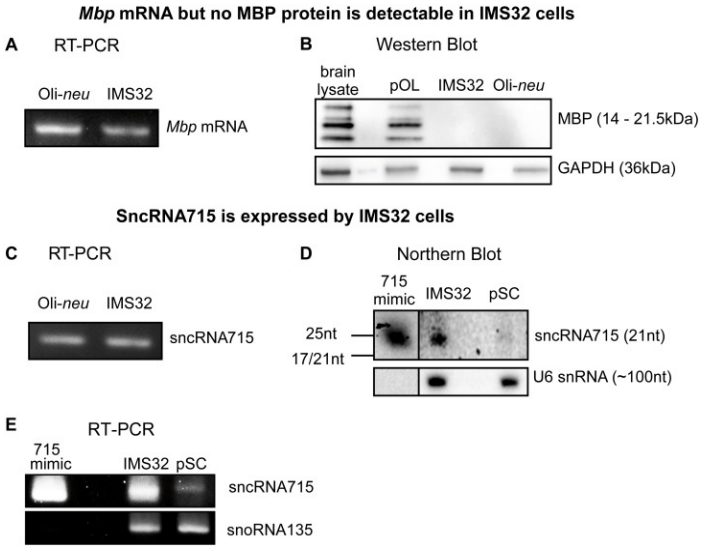
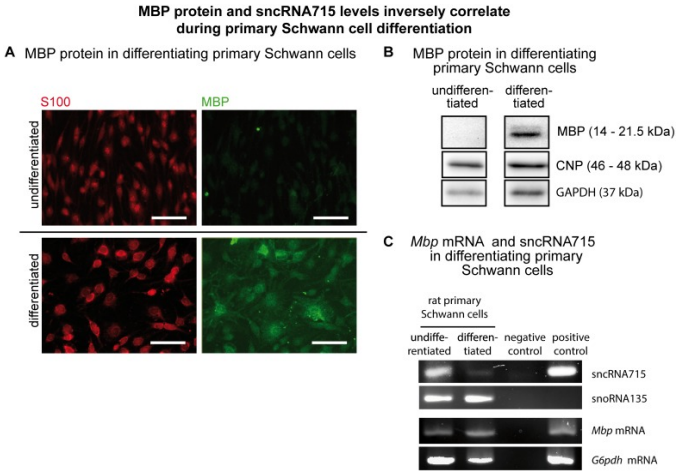
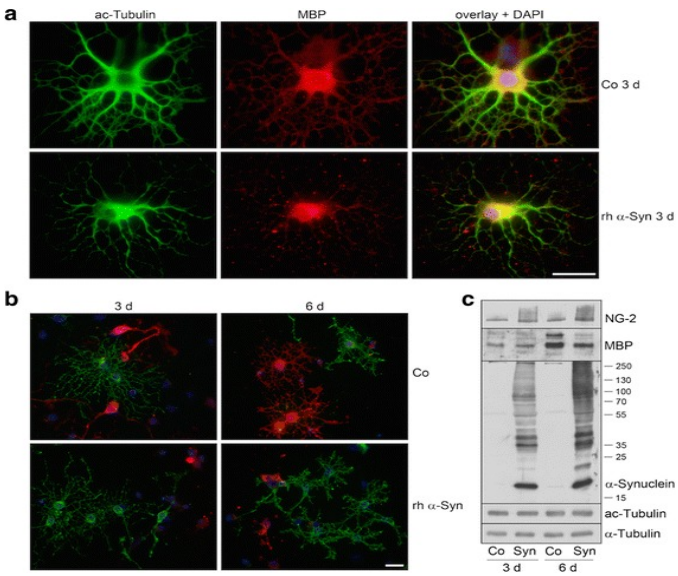


Clone 12 used to detect expression of MBP in mouse brain lysates via **Western Blot**
Image caption: ...B, Western Blots of lysates from P18 mouse brain (brain lysate), primary oligodendrocytes (pOL, 7DIV), IMS32 and Oli-*neu* cells using MBP and GAPDH (loading control) specific antibodies... (Müller, C et al.)
Dilution used: 1:500



Clone 12 used to detect expression of MBP in mouse brain lysates via **Western Blot** and **ICC**
Image caption: ...A. MBP protein can only be detected by immunocytochemistry in differentiated Schwann cells **B**, Western Blots of undifferentiated and differentiated primary Schwann cells show MBP protein only present in differentiated Schwann cells **C**, MBP and sncRNA715-specific RT-PCR on RNA extracted from undifferentiated or differentiated primary Schwann cells (Müller, C et al.)
Dilution used: 1:50 (ICC) 1:500 (WB)



Clone 12 used to detect MBP in mouse oligodendrocytes using **Immunofluorescence** and **Western Blot**
Image caption: α-Syn impairs oligodendrocyte maturation. Oligodendrocyte progenitor cells were either untreated (Co) or incubated with rh α-Syn (10 µg/ml) 2 h after plating for 3 or 6 days. Cells were subjected to immunocytochemistry using antibodies: **a** anti-acetylated α-tubulin (*green*) and anti-MBP (*red*); **b** anti-proteoglycan NG-2 (*green*) and anti-MBP (*red*). Nuclei were stained with DAPI (*blue*). Scale bar: 20 µm. **c** Exogenously applied α-Syn led to an increase in NG-2 and a decrease in MBP levels. (Grigoletto, J et al.)
Dilution used: 1:1500 (WB) 1:200 (ICC)

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References:

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