Product Data Sheet  
**MBP Polyclonal Antibody**  
Catalog Number: ORF.MBPPAB-50

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| **Product Details** | |
| **Product Name** | MBP Polyclonal Antibody |
| **Catalog Number** | ORF.MBPPAB-50 |
| **Size** | 50 μL |
| **Concentration** | 1 mg/mL |
| **Clonality** | Polyclonal |
| **Source** | Rabbit |
| **Isotype** | IgG |
| **Purification** | Antigen affinity purification |

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| **Product Description** | | **Product Image** |
| Myelin Basic Protein (MBP) is a major structural component of the myelin sheath in the central and peripheral nervous systems, produced by oligodendrocytes and Schwann cells. It is essential for the formation and maintenance of compact myelin, which is critical for efficient nerve impulse conduction.  Beyond its classic role in the nervous system, MBP-related transcripts are also expressed in bone marrow and the immune system. These transcripts originate from the extended Golli-MBP gene, which contains three additional upstream exons in addition to the classic MBP exons. Alternative splicing from two transcription start sites—Golli and MBP—produces two transcript families:   * Golli-MBP transcripts – Contain the three unique Golli exons spliced in-frame to one or more MBP exons, producing hybrid proteins with N-terminal Golli sequences linked to MBP sequences. * Classic MBP transcripts – Contain only MBP exons, producing the well-characterized myelin basic proteins.   This conserved gene structure across species suggests coordinated regulation important for the functions of both MBP and Golli proteins.  This polyclonal antibody specifically recognizes MBP and is optimized for use in Western blotting, providing sensitive and reliable detection of MBP in research applications. | |  |
| **Product Specifications and Product Specific Information** | | |
| **Applications** | WB: 1:2000 – 1:20000 | |
| **Reactivity** | ALL | |
| **Specificity** | Recognizes Maltose Binding Protein | |
| **Immunogen** | Recombinant Maltose Binding Protein | |
| **Description** | Maltose binding protein (MBP), the 370 amino acid product of the E. coli mal E gene. | |
| **Uniprot** | P0AEX9 | |
| **BiowMW** | ~ 40 kDa | |
| **Buffer** | PBS, 50% glycerol, 1 mg/mL BSA, 1% Procolin300 | |

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| **Storage and Stability** | | |
|  | **Temperature** | **Storage Time** |
| **Short Term** | 4°C | 1 month |
| **Long Term** | -20°C | 12 months |
| **Avoid repeated freeze-thaw cycles.** | | |

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| **Product Data** |
| MBP Polyclonal Antibody at 1:2000 (Figure 1) and 1:10000 (Figure 2) dilution  Line a: Recombinant MBP at 100ng  Line b: Recombinant MBP at 10 ng  Line c: Recombinant MBP at 1 ng |