

## Product datasheet

# Anti-Myelin Basic Protein antibody [EPR10144] ab155995

Recombinant RabMAb

[1 References](#) [3 Images](#)

### Overview

|                            |  |
|----------------------------|--|
| <b>Product name</b>        | Anti-Myelin Basic Protein antibody [EPR10144]  |
| <b>Description</b>         | Rabbit monoclonal [EPR10144] to Myelin Basic Protein   |
| <b>Host species</b>        | Rabbit   |
| <b>Tested applications</b> | <b>Suitable for:</b> WB<br><b>Unsuitable for:</b> ICC/IF, IHC-P or IP  |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Mouse, Rat, Human  |
| <b>Immunogen</b>           | Recombinant fragment corresponding to Human Myelin Basic Protein.  |
| <b>Positive control</b>    | Mouse brain, rat brain and Human fetal lung lysates;   |
| <b>General notes</b>       | This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> .<br>Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> . |

### Properties

|                             |  |
|-----------------------------|--|
| <b>Form</b>                 | Liquid   |
| <b>Storage instructions</b> | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.                  |
| <b>Storage buffer</b>       | pH: 7.2<br>Preservative: 0.01% Sodium azide<br>Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant |
| <b>Purity</b>               | Tissue culture supernatant   |
| <b>Clonality</b>            | Monoclonal   |

**Clone number**                      EPR10144

**Isotype**                              IgG

## Applications

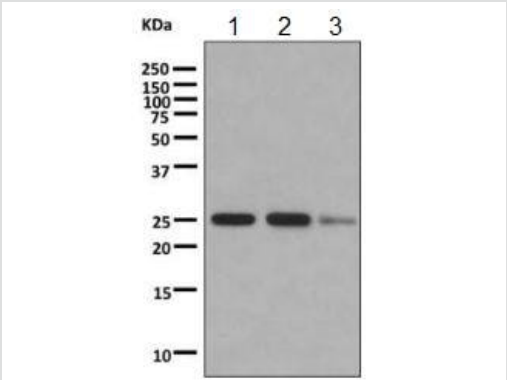
**The Abpromise guarantee**              Our **Abpromise guarantee** covers the use of ab155995 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes  |
|-------------|-----------|--|
| WB          |           | 1/1000 - 1/10000. Predicted molecular weight: 19-33 kDa. |

**Application notes**                      Is unsuitable for ICC/IF, IHC-P or IP.

## Target

|   |  |
|---|--|
| <b>Function</b>                         | The classic group of MBP isoforms (isoform 4-isoform 14) are with PLP the most abundant protein components of the myelin membrane in the CNS. They have a role in both its formation and stabilization. The smaller isoforms might have an important role in remyelination of denuded axons in multiple sclerosis. The non-classic group of MBP isoforms (isoform 1-isoform 3/Golli-MBPs) may preferentially have a role in the early developing brain long before myelination, maybe as components of transcriptional complexes, and may also be involved in signaling pathways in T-cells and neural cells. Differential splicing events combined with optional post-translational modifications give a wide spectrum of isomers, with each of them potentially having a specialized function. Induces T-cell proliferation. |
| <b>Tissue specificity</b>               | MBP isoforms are found in both the central and the peripheral nervous system, whereas Golli-MBP isoforms are expressed in fetal thymus, spleen and spinal cord, as well as in cell lines derived from the immune system.   |
| <b>Involvement in disease</b>           | Note=The reduction in the surface charge of citrullinated and/or methylated MBP could result in a weakened attachment to the myelin membrane. This mechanism could be operative in demyelinating diseases such as chronic multiple sclerosis (MS), and fulminating MS (Marburg disease).   |
| <b>Sequence similarities</b>            | Belongs to the myelin basic protein family.  |
| <b>Developmental stage</b>              | Expression begins abruptly in 14-16 week old fetuses. Even smaller isoforms seem to be produced during embryogenesis; some of these persisting in the adult. Isoform 4 expression is more evident at 16 weeks and its relative proportion declines thereafter.   |
| <b>Post-translational modifications</b> | Several charge isomers of MBP; C1 (the most cationic, least modified, and most abundant form), C2, C3, C4, C5, C6, C7, C8-A and C8-B (the least cationic form); are produced as a result of optional PTM, such as phosphorylation, deamidation of glutamine or asparagine, arginine citrullination and methylation. C8-A and C8-B contain each two mass isoforms termed C8-A(H), C8-A(L), C8-B(H) and C8-B(L), (H) standing for higher and (L) for lower molecular weight. C3, C4 and C5 are phosphorylated. The ratio of methylated arginine residues decreases during aging, making the protein more cationic.<br><br>The N-terminal alanine is acetylated (isoform 3, isoform 4, isoform 5 and isoform 6). Arg-241 was found to be 6% monomethylated and 60% symmetrically dimethylated.                                    |
| <b>Cellular localization</b>            | Myelin membrane. Cytoplasmic side of myelin.   |



Western blot - Anti-Myelin Basic Protein antibody [EPR10144] (ab155995)

**All lanes :** Anti-Myelin Basic Protein antibody [EPR10144] (ab155995) at 1/1000 dilution

**Lane 1 :** Mouse brain lysate

**Lane 2 :** Rat brain lysate

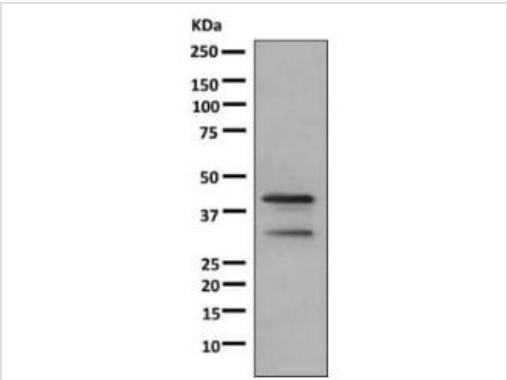
**Lane 3 :** Human fetal lung lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes :** Goat anti-rabbit HRP at 1/2000 dilution

**Predicted band size:** 19-33 kDa



Western blot - Anti-Myelin Basic Protein antibody [EPR10144] (ab155995)

Anti-Myelin Basic Protein antibody [EPR10144] (ab155995) at 1/1000 dilution + Human GST/HIS-tagged Myelin Basic Protein recombinant protein at 0.01 µg

**Secondary**

Goat anti-rabbit HRP at 1/2000 dilution

**Predicted band size:** 19-33 kDa

Why choose a recombinant antibody?

**Research with confidence**  
Consistent and reproducible results

**Long-term and scalable supply**  
Recombinant technology

**Success from the first experiment**  
Confirmed specificity

**Ethical standards compliant**  
Animal-free production

Anti-Myelin Basic Protein antibody [EPR10144] (ab155995)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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