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Product Information

Anti-Myelin Basic Protein (MBP)

produced in rabbit, affinity isolated antibody

Catalog Number M3821

Product Description

Anti-Myelin Basic Protein (MBP) is produced in rabbit using as immunogen a synthetic peptide corresponding to residues 102-116 [REDNTFKDRPSESDE] of human Myelin Basic Protein (GeneID 4155). The antibody is affinity-purified.

Anti-Myelin Basic Protein recognizes human, mouse, and rat Myelin Basic Protein. Applications include the detection of Myelin Basic Protein by immunoblotting (~17-22 kDa isoform; 33 kDa and 22 kDa forms are primarily present in neural stem cells), immunohistochemistry, and flow cytometry.

Myelin Basic Protein (MBP) functions in the nervous system in myelination and is expressed in oligodendrocytes following differentiation. There are numerous isoforms generated by differential splicing events and post-translational modifications that have specialized functions. These functions include participation in signaling pathways prior to myelination, myelination or the re-myelination process following neural injury.

Reagent

Supplied as a solution in phosphate buffered saline, containing 0.02% sodium azide.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to three months. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended.

Product Profile

<u>Immunoblotting</u>: a working dilution of 1:500 to 1:1,000 is recommended.

<u>Immunohistochemistry</u>: a working dilution of 1:100 to 1:200 is recommended.

<u>Flow cytometry</u>: a working dilution of 1:200 to 1:500 is recommended.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

- 1. Piper, D. R, et al., Identification and characterization of neuronal precursors and their progeny from human fetal tissue. *J. Neurosci Res* **66**(3):356-68 (2001).
- 2. Encinas, J. M., and Enikolopov, G., Identifying and quantitating neural stem and progenitor cells in the adult brain. *Methods Cell Biol.* **85**:243-72 (2008).
- 3. Robertson, M. J., et al., Neural stem cell engineering: directed differentiation of adult and embryonic stem cells into neurons. *Front Biosci.* **13**:21-50 (2008).

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