

Polyclonal Anti-MBP Antibody

Catalog Number: PA1050

Description

| | |
|---------------------------------|--|
| Gene Name | myelin basic protein |
| Recommended Protein Name | Myelin basic protein |
| Lot No. | 01010121450124 |
| Size | 100µg/vial |
| Form | lyophilized |
| Ig type | Rabbit IgG |
| Specificity | No cross reactivity with other proteins. |
| Purification | Immunogen affinity purified. |
| Species | Reacts with: human, mouse, rat |
| Immunogen | A synthetic peptide corresponding to a sequence at the C-terminus of human MBP (182-197aa KLGGRDSRSGSPMARR), identical to the related rat and mouse sequences. |
| Contents | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ . |

Application

| | Concentration | Tested Species | Predicted Species | Antigen Retrieval |
|---|---------------|----------------|-------------------|-------------------|
| Western blot | 0.1-0.5µg/ml | Hu, Ms, Rat | - | - |
| Immunohistochemistry (Paraffin-embedded Section) | 0.5-1µg/ml | Ms, Rat | Hu | By Heat |

Tested Species: In-house tested species with positive results.

Predicted Species: Species predicted to be fit for the product based on sequence similarities.

By Heat: Boiling the paraffin sections in 10mM citrate buffer, pH6.0, for 20mins is required for the staining of formalin/paraffin sections.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage: At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB, supported by SA1022 in IHC(P).

Background

Myelin basic protein (MBP) is a major constituent of the myelin sheath of oligodendrocytes and Schwann cells in the central nervous system and the peripheral nervous system, respectively. It is most abundant in hemopoietic system and contains seven exons distributed over 32-34 kb. MBP isolated from MS brain may differ in charge microheterogeneity which would affect antigenic determinants. MBP is mapped to chromosome 18q22-23. Failure in this gene expression would be correlated in the central white matter with extrapyramidal system degeneration signs. Moreover, it is a candidate autoantigen in the disease multiple sclerosis.

Reference

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2. Streicher R, Stoffel W. The organization of the human myelin basic protein gene. Comparison with the mouse gene. *Biol Chem Hoppe Seyler.* 1989 May; 370(5):503-10.
3. McLaurin JA, Hafler DA, Antel JP. Reactivity of normal T-cell lines to MBP isolated from normal and multiple sclerosis white matter. *J Neurol Sci.* 1995 Feb; 128(2):205-11.
4. Iester A, Vignola S, Callegarini L, Gimelli G, Alpigiani MG. [18q syndrome with deficiency of myelin basic protein (MBP)] *Pediatr Med Chir.* 1996 Mar-Apr; 18(2):201-5.
5. Tranquill LR, Skinner E, Campagnoni C, Vergelli M, Hemmer B, Muraro P, Martin R, McFarland HF, Campagnoni AT, Voskuhl RR. Human T lymphocytes specific for the immunodominant 83-99 epitope of myelin basic protein: recognition of golli MBP HOG 7. *J Neurosci Res.* 1996 Sep 15; 45(6):820-8.