

Myelin basic protein

Rudolf-Wissell-Str. 28 37079 Göttingen, Germany

Phone: +49 551-50556-0
Fax: +49 551-50556-384
E-mail: sales@sysy.com
Web: www.sysy.com

Cat.No. 295-0P; control peptide, 100 µg peptide (lyophilized)

Data Sheet

Reconstitution/ Storage	100 μg peptide, lyophilized. For reconstitution add 100 μl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. Control peptides should also be stored at -20°C when still lyophilized!
Immunogen	Synthetic peptide corresponding to AA 105 to 115 from rat MBP (UniProt Id: P02688)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	295 002, 295 003, 295 004
Remarks	This control peptide consists of the synthetic peptide (aa 105-115 of rat MBP 1 unprocessed precursor) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of peptide needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen.

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

The myelin sheath is a multi-layered membrane composed of several proteins like PLP, claudin 11 and myelin basic protein (MBP) which is specific for the nervous system. MBP functions as an insulator and increases the velocity of axonal impulse conduction.

MBP can be subdivided into the classic group consisting of isoforms 4 to 14 and the non-classic group of MBP comprising the Golli MBPs (isoforms 1 to 3). Differential splicing events and optional posttranslational modifications give rise to a wide spectrum of isomers with potentially specialized functions.

Selected General References

Molecular evolution of myelin basic protein, an abundant structural myelin component. Nawaz S, Schweitzer J, Jahn O, Werner HB

Glia (2013) 61(8): 1364-77.

Myelin management by the 18.5-kDa and 21.5-kDa classic myelin basic protein isoforms.

Harauz G, Boggs JM

Journal of neurochemistry (2013) 125(3): 334-61.

Identification of an embryonic isoform of myelin basic protein that is expressed widely in the mouse embryo.

Mathisen PM, Pease S, Garvey J, Hood L, Readhead C

Proceedings of the National Academy of Sciences of the United States of America (1993) 90(21): 10125-9.

Antibody to myelin basic protein in extracts of multiple sclerosis brain.

Bernard CC, Randell VB, Horvath LB, Carnegie PR, Mackay IR

Immunology (1981) 43(3): 447-57.

Amino acid sequence of the smaller basic protein from rat brain myelin.

Dunkley PR, Carnegie PR

The Biochemical journal (1974) 141(1): 243-55.