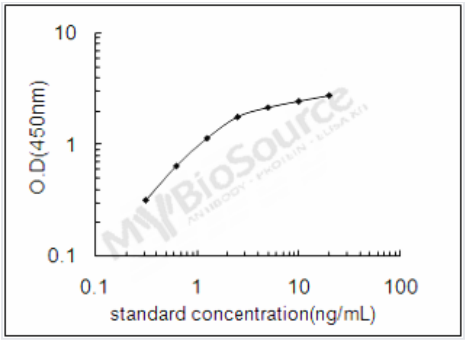
Myelin Basic (MBP) ELISA Kit for Mouse

PRODUCT OVERVIEW

Product Name	Myelin basic protein (Mbp), ELISA Kit
Full Product Name	Mouse Myelin basic protein ELISA Kit
Product Gene Name	Mbp elisa kit
Product Synonym Names	Myelin basic protein; MBP; Myelin A1 protein; Mbp; Shi
Species Reactivity	Mouse
Assay Type	Sandwich
Detection Range	0.312-20 ng/mL
Sensitivity	0.156 ng/mL
Specificity	This assay recognizes recombinant and natural mouse MBP. No significant cross-reactivity or interference was observed.
Preparation and Storage	For long term storage, please store the entire kit at -20 degree C.
Molecular Weight	12,963 Da
3D Structure	ModBase 3D Structure for P04370
Intra-Assay CV	<=7.3%
Inter-Assay CV	<=9.5%
Recovery	89%
Related Product Information for Mbp elisa kit	Intended Uses: This immunoassay kit allows for the in vitro quantitative determination of mouse MBP concentrations in serum, Plasma, tissue homogenates and Cell culture supernates and Other biological fluids. Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to MBP. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated polyclonal antibody preparation specific for MBP and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB substrate solution is added to each well. Only those wells that contain MBP, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of MBP in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Other Notes	Small volumes of Mbp elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for Mbp purchase	MBS2884758 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Myelin basic protein (Mbp) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing Mbp. The ELISA analytical biochemical technique of the MBS2884758 kit is based on Mbp antibody-Mbp antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect Mbp antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, Mbp. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of Mbp elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for Mbp. It may not necessarily be applicable to this product.

NCBI GI #	69885018
NCBI GeneID	17196
NCBI Accession #	NP_001020416.1
UniProt Primary Accession #	P04370
UniProt Secondary Accession #	Q01585; Q03139; Q03176; Q61836; Q61837; Q99KE4; Q9QWP1
UniProt Related Accession #	P04370
GenBank Nucleotide #	NM_001025245.1
NCBI Official Full Name	Golli-Mbp isoform 2
NCBI Official Synonym Full Names	myelin basic protein
NCBI Official Symbol	Mbp
NCBI Official Synonym Symbols	mld; shi; Hmbpr; C76307; R75289; golli-mbp
UniProt Protein Name	Myelin basic protein
UniProt Synonym Protein Names	Myelin A1 protein
Protein Family	Myelin basic protein
UniProt Gene Name	Mbp
UniProt Synonym Gene Names	Shi; MBP
UniProt Entry Name	MBP_MOUSE
NCBI Protein Information	Golli-Mbp; myelin basic protein
NCBI Summary for Mbp	The protein encoded by the classic Mbp gene is a major constituent of the myelin sheath of oligodendrocytes and Schwann cells in the nervous system. However, Mbp-related transcripts are also present in the bone marrow and the immune system. These mRNAs arise from the long Mbp gene (otherwise called "Golli-Mbp") that contains 3 additional exons located upstream of the classic Mbp exons. Alternative splicing from the Golli and the Mbp transcription start sites gives rise to 2 sets of Mbp-related transcripts and gene products. The Golli mRNAs contain 3 exons unique to Golli-Mbp, spliced in-frame to 1 or more Mbp exons. They encode hybrid proteins that have N-terminal Golli aa sequence linked to Mbp aa sequence. The second family of transcripts contain only Mbp exons and produce the well characterized myelin basic proteins. This complex gene structure is conserved among species suggesting that the Mbp transcription unit is an integral part of the Golli transcription unit and that this arrangement is important for the function and/or regulation of these genes. Mutation of the Mbp gene is associated with the 'shiverer' and 'myelin deficient' phenotypes in mouse. [provided by RefSeq, Jul 2008]

UniProt Comments for Mbp	MBP: 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. Homodimer. Isoform 3 exists as a homodimer. 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. Belongs to the myelin basic protein family. 6 isoforms of the human protein are produced by alternative splicing. Protein type: Cytoskeletal Cellular Component: cell projection; cell soma; compact myelin; cytoplasm; internode region of axon; membrane; myelin sheath; nucleus; plasma membrane Molecular Function: protease binding; structural constituent of myelin sheath Biological Process: central nervous system development; myelination; response to toxin
Research Articles on Mbp	**1.** Results suggest that GAL is a regulator of myelination, as demonstrated by MBP synthesis, and may be one of the myelination promoters
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