

Rabbit MBP Polyclonal Antibody | anti-MBP antibody

MBP Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326305	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

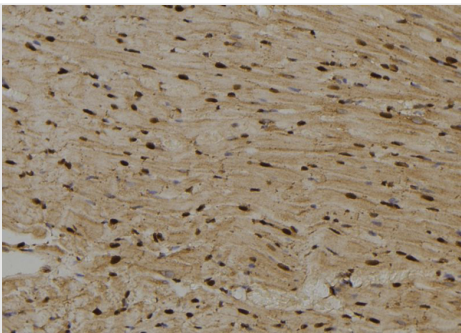
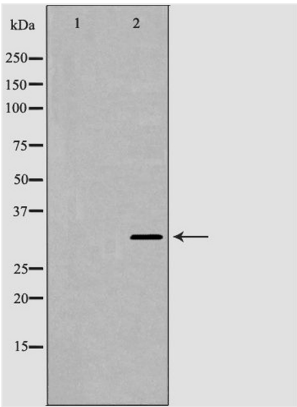
PRODUCT SYNONYMS

MBP; Polyclonal Antibody; MBP Antibody; GDB; Golli MBP; myelin basic protein; Hemopoietic MBP; HMBPR; HUGO; MBP_CAVPO; MBP_HUMAN; MGC99675; MLD; Myelin A1 protein; Myelin A1 Protein; basic; Myelin basic protein; Myelin Deficient; Myelin membrane encephalitogenic protein; OTTHUMP00000163776; OTTHUMP00000174387; OTTHUMP00000174388; SHI; Shiverer; SP; anti-MBP antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	MBP antibody detects endogenous levels of total MBP
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	197
Applicable Applications for anti-MBP antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MBP
Subcellular Location	Myelin Membrane. Cytoplasmic side of myelin.
Tissue Specificity	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.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA326305 at 1/100 staining Rat heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of Mouse liver tissue lysates, using MBP Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-MBP antibody

Description: MBP belongs to the myelin basic protein family. The classic group of MBP isoforms (isoform 4-isoform 14) are 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. This is a rabbit polyclonal antibody raised against the full-length of human MBP, and is capable of recognizing multiple isoforms of MBP.

Function: 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.

Subunit Structure: Homodimer. Isoform 3 exists as a homodimer.

Post-translational Modifications: 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. 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. Phosphorylated by TAOK2, VRK2, MAPK11, MAPK12, MAPK14 and MINK1.

Similarity: Belongs to the myelin basic protein family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	68509930
NCBI GeneID	4155
NCBI Accession #	NP_001020252.1
NCBI GenBank Nucleotide #	NM_001025081.1
UniProt Accession #	P02686; Q15337; Q15338; Q15339; Q15340; A4FU54; A6NI84; A8MY86; A8MYL4; B3KY66; B7ZKS2; B7ZKS4
Molecular Weight	Observed: 33 kDa Predicted: 34 kDa
NCBI Official Full Name	myelin basic protein isoform 1

NCBI Official Synonym Full Names	myelin basic protein
NCBI Official Symbol	MBP
NCBI Protein Information	myelin basic protein; Golli-MBP; proline-rich proteoglycan 2
UniProt Protein Name	Myelin basic protein
UniProt Gene Name	MBP
UniProt Synonym Gene Names	MBP

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/mbp-antibody-immunohistochemistry-western-blot-elisa/326305>