

Product datasheet

Anti-Myelin Basic Protein antibody ab28541

2 Images

Overview

Product name	Anti-Myelin Basic Protein antibody
Description	Rabbit polyclonal to Myelin Basic Protein
Host species	Rabbit
Specificity	This antibody is specific to myelin basic proteins. It may cross react with other isoforms of myelin basic proteins.
Tested applications	Suitable for: WB, IP, Sandwich ELISA
Species reactivity	Reacts with: Cow, Pig Predicted to work with: Mammals 
Immunogen	Full length myelin basic protein (Cow).
Positive control	Bovine brain extract.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.00 Preservative: 0.1% Sodium azide Constituent: 1.81% Tris acetate
Purification notes	The antibody was affinity purified on agarose with an immuno dominant peptide (PRTPPPSQGKGRGL), which is a universal peptide sequence for all isoforms of mammalian myelin basic proteins.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab28541** in the following tested applications.

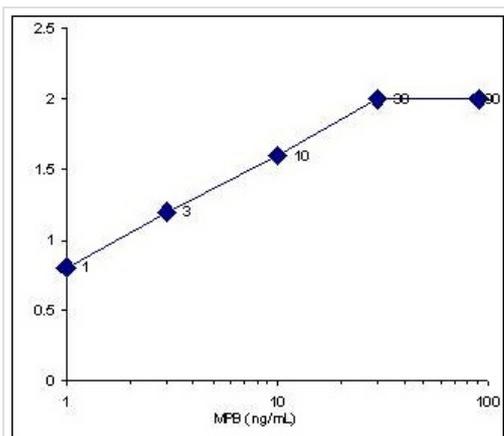
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent dilution. Predicted molecular weight: 20 kDa.
IP		Use at an assay dependent dilution.
Sandwich ELISA		Use at an assay dependent dilution. To be used as capture antibody. Pair with ab77895 - Rabbit polyclonal to Myelin Basic Protein (HRP)

Target

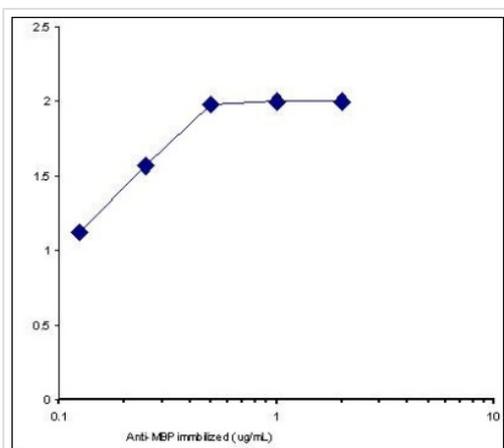
Function	The classic group of MBP isoforms (isoform 4-isoform 14) are with PLP the most abundant protein components of the myelin membrane in the CNS. They have a role in both its formation and stabilization. The smaller isoforms might have an important role in remyelination of denuded axons in multiple 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.
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.
Involvement in disease	Note=The reduction in the surface charge of citrullinated and/or methylated MBP could result in a weakened attachment to the myelin membrane. This mechanism could be operative in demyelinating diseases such as chronic multiple sclerosis (MS), and fulminating MS (Marburg disease).
Sequence similarities	Belongs to the myelin basic protein family.
Developmental stage	Expression begins abruptly in 14-16 week old fetuses. Even smaller isoforms seem to be produced during embryogenesis; some of these persisting in the adult. Isoform 4 expression is more evident at 16 weeks and its relative proportion declines thereafter.
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.
Cellular localization	Myelin membrane. Cytoplasmic side of myelin.

Images



Sandwich ELISA - Anti-Myelin Basic Protein antibody (ab28541)

Fixed Immobilized Anti-MBP (ab28541): 2 ug/mL, 100 ul/well
 Captured Antigen: Swine MBP , range from 1 to 90 ng/mL
 Detection: anti-MBP HRP (ab77895), 0.25 ug/mL in 1% BSA and PBSt



Sandwich ELISA - Anti-Myelin Basic Protein antibody (ab28541)

Immobilized Anti-MBP (ab28541): range from 0.125 to 2 ug/ml, 100 ul/well
 Fixed Captured Antigen: Swine MBP, 500 ng/mL
 Detection: anti-MBP HRP (ab77895), 0.25 ug/mL in 1% BSA and PBSt

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors