

Anti-Myelin Basic Protein antibody [IGX3421R-1] ab216668

リコンビナント

★★★★★ [6 Abreviews](#) [5 References](#) [画像数 6](#)

製品の概要

製品名	Anti-Myelin Basic Protein antibody [IGX3421R-1]
製品の詳細	Rabbit monoclonal [IGX3421R-1] to Myelin Basic Protein
由来種	Rabbit
アプリケーション	適用あり: WB, IHC-P
種交差性	交差種: Mouse, Rat, Human, Recombinant fragment
免疫原	Full length native protein (purified). This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Human, mouse and rat brain tissue lysate, Myelin Basic Protein (recombinant protein). IHC-P: FFPE sections of human brain (Hippocampus) and mouse brain tissue.
特記事項	This product was made using <u>synthetic libraries and phage display technology</u> . This antibody is a recombinant chimeric antibody. Rabbit chimeric monoclonal antibody (Human Fab/ Rabbit Fc).

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	IGX3421R-1
アイソタイプ	IgG1

アプリケーション

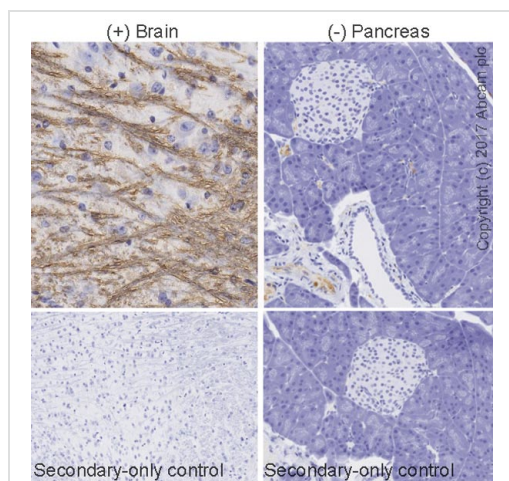
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アプリケーション	Abreviews	特記事項
WB	★★★★☆ (1)	Use a concentration of 0.25 - 1 µg/ml. Detects a band of approximately 23,20,17 kDa (predicted molecular weight: 33 kDa).
IHC-P	★★★★★ (5)	Use a concentration of 0.5 - 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

ターゲット情報

機能	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.
組織特異性	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.
関連疾患	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).
配列類似性	Belongs to the myelin basic protein family.
発生段階	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.
翻訳後修飾	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.
細胞内局在	Myelin membrane. Cytoplasmic side of myelin.

画像



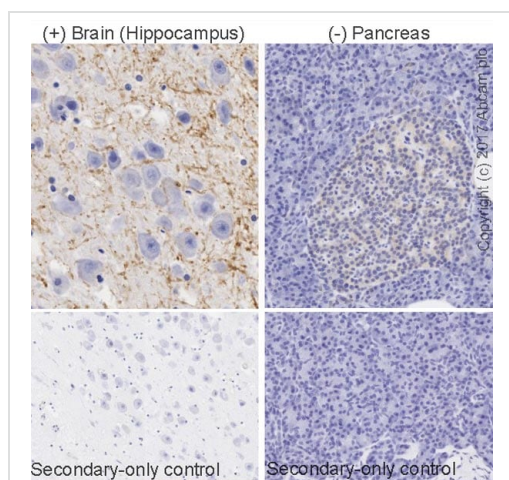
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myelin Basic Protein antibody [IGX3421R-1] (ab216668)

IHC image of Myelin Basic Protein staining in a section of formalin-fixed paraffin-embedded normal mouse brain and normal mouse pancreas, performed on a Leica BOND™. The sections were pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab216668, 1ug/ml, for 15 mins at room temperature.

An HRP-conjugated goat anti-Rabbit IgG secondary (**ab97080**) was used for 15 mins at room temperature. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

Pancreatic tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.



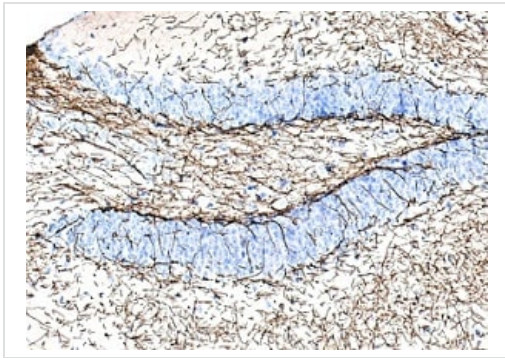
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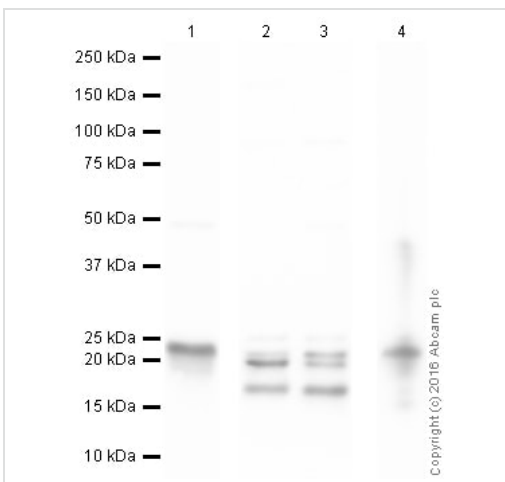
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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myelin Basic Protein antibody [IGX3421R-1] (ab216668)

This image is courtesy of an Abreview submitted by Carl Hobbs

Ab216668 staining myelin basic protein in Mouse brain tissue sections by Immunohistochemistry (IHC-P - formaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 2% BSA for 10 minutes at 21°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/4000 in blocking buffer) for 2 hours at 21°C. A diluted Biotin-conjugated Goat anti-rabbit IgG polyclonal (1/300) was used as the secondary antibody.



Western blot - Anti-Myelin Basic Protein antibody [IGX3421R-1] (ab216668)

All lanes : Anti-Myelin Basic Protein antibody [IGX3421R-1] (ab216668) at 0.25 µg/ml

Lane 1 : Human brain tissue lysate - total protein (**ab29466**) at 10 µg

Lane 2 : Mouse brain tissue lysate at 10 µg

Lane 3 : Rat brain tissue lysate at 10 µg

Lane 4 : Myelin Basic Protein (Recombinant Protein) at 0.1 µg

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 33 kDa

Observed band size: 17,20,23 kDa

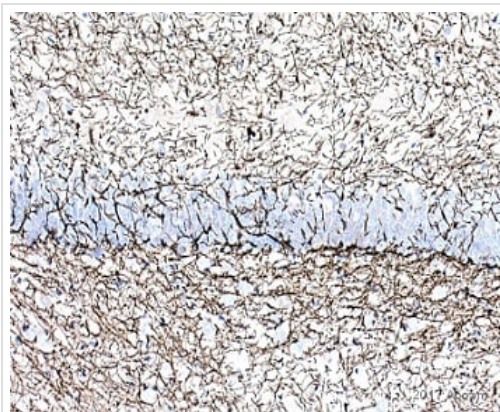
Exposure time :

Lane 1 & 4 : 90 seconds.

Lanes 2 & 3 : 4 minutes.

This blot was produced using a 4-12% Bis-tris gel under the MES buffer system. The gel was run at 200V for 35 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes.

The membrane was then blocked for an hour using 3% milk before being incubated with ab216668 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myelin Basic Protein antibody [IGX3421R-1] (ab216668)

This image is courtesy of an Abreview submitted by Carl Hobbs

Ab216668 staining myelin basic protein in Rat brain tissue sections by Immunohistochemistry (IHC-P - formaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 2% BSA for 10 minutes at 21°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/6000 in blocking buffer) for 2 hours at 21°C. A diluted Biotin conjugated Goat anti-rabbit IgG polyclonal (1/300) was used as the secondary antibody.

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Anti-Myelin Basic Protein antibody [IGX3421R-1] (ab216668)

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