

Mouse MYELIN PROTEOLIPID PROTEIN Monoclonal Antibody | anti-PLP1 antibody

MOUSE ANTI MYELIN PROTEOLIPID PROTEIN

CATALOG #	HOST	APPLICATIONS
AAA49446	Mouse	Western Blot, Immunohistochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, Immunohistochemistry

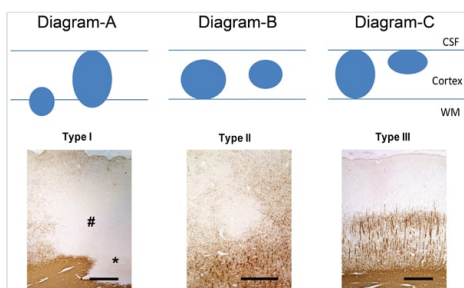
PRODUCT SYNONYMS

MYELIN PROTEOLIPID PROTEIN; Monoclonal Antibody; MOUSE ANTI MYELIN PROTEOLIPID PROTEIN; anti-PLP1 antibody

PRODUCT SPECIFICATIONS

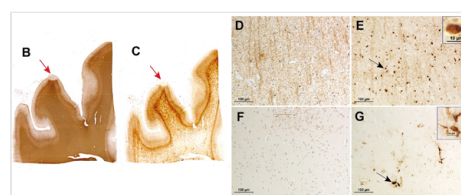
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	plpc1
Form/Format	Purified Purified IgG - liquid
Concentration	IgG concentration 1 mg/ml (varies by lot)
Sequence Length	277
Applicable Applications for anti-PLP1 antibody	WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry)
Perservative Stabilisers	0.09% Sodium Azide Preparation
Buffer Solution	Phosphate buffered saline
Target Species	Bovine
Preparation and Storage	Store at 4 degree C or at -20 degree C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. Shelf Life: 18 months from date of despatch.

IMAGES



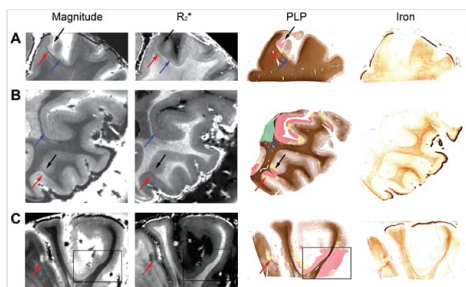
Application Data

Published customer image: NL scheme and PLP staining. (A) Type-I NL with demyelination of the whole width of the cortex (#) and adjacent WM (*). (B) Type-II intracortical lesion evolving around a vessel. (C) Type-III subpial NL. Demyelination spreads from the pial surface until cortical layer 3. Scale bars represent 500 um. From: Yao B, Hametner S, van Gelderen P, Merkle H, Chen C, et al. (2014) 7 Tesla Magnetic Resonance Imaging to Detect Cortical Pathology in Multiple Sclerosis. PLoS ONE 9(10): e108863. doi:10.1371/journal.pone.0108863



Application Data

Published customer image: Iron loss in NLs. PLP myelin staining (B) and iron staining (C) on two consecutive slides of tissue MS2 disclose iron loss together with myelin loss in a NL (red arrows). Higher magnification (D, E, F, G) of PLP (D, F) and iron stainings (E, G). In NAGM (D, E), iron is present in oligodendrocytes (black arrow and inset in E) and myelin sheaths. In a NL (F, G), iron is removed from the demyelinated cortical parenchyma and present in perivascular macrophages and microglia (black arrow and inset in G). From: Yao B, Hametner S, van Gelderen P, Merkle H, Chen C, et al. (2014) 7 Tesla Magnetic Resonance Imaging to Detect Cortical Pathology in Multiple Sclerosis. PLoS ONE 9(10): e108863. doi:10.1371/journal.pone.0108863



Application Data

Published customer image: NLS on MRI and tissue sections stained for PLP and iron. Examples of NLS from tissue MS1 (A, B and C) identified on MRI magnitude (TE = 25.2 ms) and R2* images as well as color-coded PLP-staining and iron staining. Red arrows point towards NLS identified by MRI and confirmed to correspond to area of demyelination by the color-coded PLP staining. Blue arrows point towards NLS identified by the color-coded PLP staining and only retrospectively identified by MRI. Black arrows and black box point towards NLS identified by the color-coded PLP staining and not by MRI even upon a second retrospective image inspection. In the black box we include a large area of demyelination which goes entirely undetected by MRI. In the color-coded PLP staining of figure: green = complete WM demyelination, red = complete GM demyelination, yellow = areas of variably reduced myelin density. From: Yao B, Hametner S, van Gelderen P, Merkle H, Chen C, et al. (2014) 7 Tesla Magnetic Resonance Imaging to Detect Cortical Pathology in Multiple Sclerosis. PLoS ONE 9(10): e108863. doi:10.1371/journal.pone.0108863

ADDITIONAL INFORMATION

Related Product Information for anti-PLP1 antibody	Mouse anti myelin proteolipid protein antibody, clone plpc1 recognizes myelin proteolipid protein (PLP) in many mammalian species (Stoffel et al. 1985). Clone plpc1 also recognizes the alternative PLP splice variant lacking part of the cytoplasmic domain (amino acids 117-151), known as DM20 (Simons et al. 1987). PLP encodes the major protein components of compact CNS myelin and mutations in the PLP gene can lead to severe dysmyelinating disease (Hudson et al. 1989). Mouse anti myelin proteolipid protein, clone plpc1 has proved a useful immunohistochemical tool for the study of central nervous system injury in patients with multiple sclerosis (Seewan et al. 2011, Huizinga et al. 2011)
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NCBI AND UNIPROT INFORMATION

NCBI GI #	68299750
NCBI GeneID	281410
NCBI Accession #	NP_776574.2
NCBI GenBank Nucleotide #	NM_174149.4
UniProt Accession #	P04116; Q3ZBU4; Q9TSH8; A2VDT3
Molecular Weight	26,212 Da
NCBI Official Full Name	myelin proteolipid protein
NCBI Official Synonym Full Names	proteolipid protein 1
NCBI Official Symbol	PLP1
NCBI Official Synonym Symbols	PLP
NCBI Protein Information	myelin proteolipid protein; lipophilin
UniProt Protein Name	Myelin proteolipid protein
UniProt Gene Name	PLP1
UniProt Synonym Gene Names	PLP; PLP
UniProt Entry Name	MYPR_BOVIN

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://stage.aaabiotech.com/monoclonal/myelin-proteolipid-protein-antibody-clone-plpc1-western-blot-immunohistochemistry-immunofluorescence-flow-cytometry-immunohistochemistry-elisa/49446>