Datasheet: MCA839G
BATCH NUMBER 163746

Product Details

Description: MOUSE ANTI MYELIN PROTEOLIPID PROTEIN
Specificity: MYELIN PROTEOLIPID PROTEIN
Other names: DM20, PLP
Format: Purified
Product Type: Monoclonal Antibody
Clone: plpc1
Isotype: IgG2a
Quantity: 0.1 mg

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

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<tr>
<th>Applications</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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<td>Flow Cytometry</td>
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<td>Immunohistology - Frozen</td>
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<td>Immunohistology - Paraffin</td>
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<td>Immunofluorescence</td>
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Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species

Bovine

Species Cross Reactivity

Reacts with: Human, Tenerife lizard (Gallotia galloti)
N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid
Preparation
Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution
Phosphate buffered saline

Preservative Stabilisers
<0.1% Sodium Azide (NaN$_3$)

Approx. Protein Concentrations
IgG concentration 1 mg/ml

Immunogen
Synthetic peptide GRGTKF corresponding to C terminal region of myelin proteolipid protein.

External Database Links

UniProt: P04116 Related reagents

Entrez Gene: 281410 PLP1 Related reagents

Synonyms
PLP

RRID
AB_2237198

Fusion Partners
Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.

Specificity

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)

References
5. Santos, E. et al. (2006) Peculiar and typical oligodendrocytes are involved in an uneven
27. Klok, M.D. et al. (2015) Interferon-α and the calcifying microangiopathy in Aicardi-


76. Wiggermann, V. et al. (2023) Quantitative magnetic resonance imaging reflects different levels of histologically determined myelin densities in multiple sclerosis, including remyelination in inactive multiple sclerosis lesions. *Brain Pathol.* : e13150.

**Storage**
This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

**Guarantee**
12 months from date of despatch

**Health And Safety Information**
Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA839G

**Regulatory**
For research purposes only

**Related Products**

**Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...)  RPE
Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP
Goat Anti Mouse IgG (STAR76...) RPE
Rabbit Anti Mouse IgG (STAR13...) HRP
Goat Anti Mouse IgG (STAR70...) FITC
Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP
Goat Anti Mouse IgG (STAR77...) HRP
Rabbit Anti Mouse IgG (STAR9...) FITC

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL (MCA929)

North & South America  Tel: +1 800 265 7376  Fax: +1 919 878 3751
Email: antibody_sales_us@bio-rad.com

Worldwide  Tel: +44 (0)1865 852 700  Fax: +44 (0)1865 852 739
Email: antibody_sales_uk@bio-rad.com

Europe  Tel: +49 (0) 89 8090 95 21  Fax: +49 (0) 89 8090 95 50
Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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