

Datasheet: MCA839G

**BATCH NUMBER 163746**

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

## Product Details

### 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			
Immunohistology - Frozen	▪			
Immunohistology - Paraffin	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			
Immunofluorescence	▪			

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.

<b>Target Species</b>	Bovine
<b>Species Cross Reactivity</b>	<p>Reacts with: Human, Tenerife lizard (<i>Gallotia galloti</i>)</p> <p><b>N.B.</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.</p>
<b>Product Form</b>	Purified IgG - liquid

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	<0.1% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1 mg/ml
<b>Immunogen</b>	Synthetic peptide GRGTKF corresponding to C terminal region of myelin proteolipid protein.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P04116</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">281410</a>    PLP1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	PLP
<b>RRID</b>	AB_2237198
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti myelin proteolipid protein antibody, clone plpc1</b> recognizes myelin proteolipid protein (PLP) in many mammalian species (<a href="#">Stoffel et al. 1985</a>). Clone plpc1 also recognizes the alternative PLP splice variant lacking part of the cytoplasmic domain (amino acids 117-151), known as DM20 (<a href="#">Simons et al. 1987</a>) .</p> <p>PLP encodes the major protein components of compact CNS myelin and mutations in the PLP gene can lead to severe <a href="#">dysmyelinating</a> disease (<a href="#">Hudson et al. 1989</a>). 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 (<a href="#">Seewan et al. 2011</a>, <a href="#">Huizinga et al. 2011</a>)</p>
<b>References</b>	<ol style="list-style-type: none"> <li>Boon, L. <i>et al.</i> (2001) Prevention of experimental autoimmune encephalomyelitis in the common marmoset (<i>Callithrix jacchus</i>) using a chimeric antagonist monoclonal antibody against human CD40 is associated with altered B cell responses. <a href="#">J Immunol. 167: 2942-9.</a></li> <li>Jaśkiewicz, E. <i>et al.</i> (2005) Expression of recombinant forms of human 21.5 kDa myelin basic protein and proteolipid protein in CHO cells. <a href="#">Acta. Biochim. Pol. 52: 863-6.</a></li> <li>Pomeroy, I.M. <i>et al.</i> (2005) Demyelinated neocortical lesions in marmoset autoimmune encephalomyelitis mimic those in multiple sclerosis. <a href="#">Brain. 128: 2713-21.</a></li> <li>Jatana, M. <i>et al.</i> (2006) Combination of systemic hypothermia and N-acetylcysteine attenuates hypoxic-ischemic brain injury in neonatal rats. <a href="#">Pediatr Res. 59 (5): 684-9.</a></li> <li>Santos, E. <i>et al.</i> (2006) Peculiar and typical oligodendrocytes are involved in an uneven</li> </ol>

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<b>Storage</b>	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety</b>	Material Safety Datasheet documentation #10040 available at:

**Information** <https://www.bio-rad-antibodies.com/SDS/MCA839G>  
10040

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [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](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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