

## Datasheet: MCA839G

|                      |                                       |
|----------------------|---------------------------------------|
| <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>       | Reacts with: Human, Tenerife lizard ( <i>Gallotia galloti</i> )<br><b>N.B.</b> Antibody reactivity and working conditions may vary between species. |
| <b>Product Form</b>                   | Purified IgG - liquid                                                                                                                               |
| <b>Preparation</b>                    | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant                                                       |
| <b>Buffer Solution</b>                | Phosphate buffered saline                                                                                                                           |
| <b>Preservative Stabilisers</b>       | 0.09% Sodium Azide                                                                                                                                  |
| <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><br/> <a href="#">P04116</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">281410</a>   PLP1   <a href="#">Related reagents</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Synonyms</b>                | PLP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Fusion Partners</b>         | Spleen cells from immunised 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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## Storage

Store at +4°C or at -20°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.

|                                      |                                                                                                                                                                                                          |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shelf Life</b>                    | 18 months from date of despatch.                                                                                                                                                                         |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10040 available at:<br>10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a> |
| <b>Regulatory</b>                    | For research purposes only                                                                                                                                                                               |

## Related Products

### Recommended Secondary Antibodies

|                                         |                                                                                                                                                                                                                                     |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">Alk. Phos.</a> , <a href="#">HRP</a>                                                                                                                                                                                    |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®549</a> ,<br><a href="#">DyLight®649</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>                                                                                                                                                                                                                |
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>                                                                                                                                                                                                                 |
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>                                                                                                                                                                                          |
| Rabbit Anti Mouse IgG (STAR8...)        | <a href="#">DyLight®800</a>                                                                                                                                                                                                         |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>                                                                                                                                                                                                                |
| Human Anti Mouse IgG2a (HCA037...)      | <a href="#">FITC</a> , <a href="#">HRP</a>                                                                                                                                                                                          |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>                                                                                                                                                                                                                 |

### Recommended Negative Controls

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

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
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