

## Datasheet: MCA409S

**BATCH NUMBER 171790**

<b>Description:</b>	RAT ANTI MBP (aa82-87)
<b>Specificity:</b>	MBP (aa82-87)
<b>Other names:</b>	MYELIN BASIC PROTEIN
<b>Format:</b>	S/N
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	12
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	2 ml

## 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	▪			
Radioimmunoassays	▪			

Where this product 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 product for use in their own system using appropriate negative/positive controls.

### Target Species

Bovine

### Species Cross Reactivity

Reacts with: Mouse, Rabbit, Rat, Guinea Pig, Sheep, Human, Chicken, Pig  
Based on sequence similarity, is expected to react with: Mammals

**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.

<b>Product Form</b>	Tissue Culture Supernatant - liquid
<b>Buffer Solution</b>	0.1M TRIS
<b>Preservative Stabilisers</b>	0.1% Sodium Azide
<b>Immunogen</b>	Bovine MBP.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P02687</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">618684</a>    MBP    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_325004
<b>Fusion Partners</b>	Spleen cells from an immunized outbred rat were fused with cells of the mouse NS0 myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti MBP antibody, clone 12</b> recognizes myelin basic protein from a wide range of species. Rat anti MBP antibody, clone 12 reacts weakly with peptides ending in the Phe 91 where the 91-92 Phe-Phe bond is broken. Synthetic peptide 82-99 reacts very well with Rat anti MBP antibody, clone 12, as does intact MBP. Further epitope analysis indicates binding to a region defined by amino acids 82-87 (DENPVV).</p> <p>Rat anti MBP antibody, clone 12 has been reported as being suitable for use in western blotting (<a href="#">Glynn <i>et al.</i> 1987</a>).</p>
<b>References</b>	<ol style="list-style-type: none"> <li>Groome, N.P. <i>et al.</i> (1986) Region-specific immunoassays for human myelin basic protein. <a href="#">J Neuroimmunol. 12 (4): 253-64.</a></li> <li>Glynn, P. <i>et al.</i> (1987) Basic protein dissociating from myelin membranes at physiological ionic strength and pH is cleaved into three major fragments. <a href="#">J Neurochem. 48 (3): 752-9.</a></li> <li>Hruby, S. <i>et al.</i> (1987) Monoclonal antibodies reactive with myelin basic protein. <a href="#">Mol Immunol. 24 (12): 1359-64.</a></li> <li>Relvas, J.B. <i>et al.</i> (2001) Expression of dominant-negative and chimeric subunits reveals an essential role for beta1 integrin during myelination. <a href="#">Curr Biol. 11: 1039-43.</a></li> <li>Massa, P.T. <i>et al.</i> (2002) Critical role for protein tyrosine phosphatase SHP-1 in controlling infection of central nervous system glia and demyelination by Theiler's murine encephalomyelitis virus. <a href="#">J Virol. 76:8335-46.</a></li> <li>Massa, P.T. <i>et al.</i> (2004) Dysmyelination and reduced myelin basic protein gene expression by oligodendrocytes of SHP-1-deficient mice. <a href="#">J Neurosci Res. 77: 15-25.</a></li> <li>Homchaudhuri L <i>et al.</i> (2009) Influence of membrane surface charge and post-translational modifications to myelin basic protein on its ability to tether the Fyn-SH3 domain to a membrane <i>in vitro</i>. <a href="#">Biochemistry. 48 (11): 2385-93.</a></li> <li>Relucio, J. <i>et al.</i> (2009) Laminin alters fyn regulatory mechanisms and promotes</li> </ol>

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10451 available at: <https://www.bio-rad-antibodies.com/SDS/MCA409S>

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

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