

## Datasheet: MCA2235PB

**BATCH NUMBER 168662**

<b>Description:</b>	RAT ANTI MOUSE CD206:Pacific Blue®
<b>Specificity:</b>	CD206
<b>Other names:</b>	MANNOSE RECEPTOR C TYPE 1
<b>Format:</b>	Pacific Blue®
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MR5D3
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	100 TESTS/1ml

### 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 (1)	▪			Neat

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.

**(1) CD206 is expressed weakly at the cell surface. Staining may be increased following membrane permeabilisation. We recommend the use of Leucoperm (Product Code [BUF09](#)) for this purpose.**

<b>Target Species</b>	Mouse						
<b>Product Form</b>	Purified IgG conjugated to Pacific Blue® - liquid						
<b>Max Ex/Em</b>	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>Pacific Blue®</td> <td>410</td> <td>455</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Pacific Blue®	410	455
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
Pacific Blue®	410	455					
<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</b>	0.09% sodium azide (NaN <sub>3</sub> )						

<b>Stabilisers</b>	1% bovine serum albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml
<b>Immunogen</b>	Chimaeric CRD4-7-Fc protein
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q61830</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">17533</a>    Mrc1    <a href="#">Related reagents</a></p>
<b>Fusion Partners</b>	Spleen cells from immunized Fischer rats were fused with cells of the Y3 myeloma cell line
<b>Specificity</b>	<p><b>Rat anti Mouse CD206 antibody, clone MR5D3</b> recognizes the mouse mannose receptor, a ~175 kDa type 1 membrane glycoprotein that is also known as CD206. CD206 is expressed on most tissue macrophages, certain endothelial cells and <i>in vitro</i> derived dendritic cells (<a href="#">Zamze et al. 2002</a>).</p> <p>The mannose receptor, CD206, is composed of a N-terminal cysteine-rich domain, a fibronectin type II domain, eight tandemly arranged C-type lectin domains (CTLD), a transmembrane domain, and a cytoplasmic domain. The terminal cysteine-rich domain binds sulfated sugars, and the CTLD recognizes carbohydrates terminating in mannose, fucose and N-acetylglucosamine, all sugars found on microorganisms and on some endogenous proteins (<a href="#">Su et al. 2005</a>).</p> <p>Rat anti mouse CD206 antibody, clone MR5D3 has been reported to be non-inhibitory for the binding of the mannose receptor to carbohydrate ligands (<a href="#">Zamze et al. 2002</a>). Clone MR5D3 has also been shown to work in western blotting (<a href="#">Martinez-Pomares et al. 2003</a> and <a href="#">Su et al. 2005</a>).</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl. The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR ( <a href="#">BUF041A/BUF041B</a> ).
<b>References</b>	<ol style="list-style-type: none"> <li>Martinez-Pomares, L. <i>et al.</i> (2003) Analysis of mannose receptor regulation by IL-4, IL-10, and proteolytic processing using novel monoclonal antibodies. <a href="#">J Leukoc Biol. 73 (5): 604-13.</a></li> <li>Su, Y. <i>et al.</i> (2005) Glycosylation influences the lectin activities of the macrophage mannose receptor. <a href="#">J Biol Chem. 280: 32811-20.</a></li> <li>Hassan, M.F. <i>et al.</i> (2006) The <i>Schistosoma mansoni</i> hepatic egg granuloma provides a favorable microenvironment for sustained growth of <i>Leishmania donovani</i>. <a href="#">Am J Pathol. 169: 943-53.</a></li> <li>Devey, L. <i>et al.</i> (2009) Tissue-resident macrophages protect the liver from ischemia reperfusion injury via a heme oxygenase-1-dependent mechanism. <a href="#">Mol Ther. 17: 65-72.</a></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. This product is photosensitive and should be protected from light.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**      Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2235PB>

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**Regulatory**                      For research purposes only

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## Related Products

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Pacific Blue® \(MCA1212PB\)](#)

### Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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