

## Datasheet: MCA2235PET

**BATCH NUMBER INN1609**

<b>Description:</b>	RAT ANTI MOUSE CD206:RPE
<b>Specificity:</b>	CD206
<b>Other names:</b>	MANNOSE RECEPTOR C TYPE 1
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MR5D3
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	25 TESTS

### 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 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 their own system using appropriate negative/positive controls.

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

<b>Target Species</b>	Mouse						
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilised						
<b>Reconstitution</b>	Reconstitute with 0.25 ml distilled water						
<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>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
RPE 488nm laser	496	578					
<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>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin 5% Sucrose
<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>RRID</b>	AB_2144900
<b>Fusion Partners</b>	Spleen cells from immunised 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>	<p>Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.</p> <p>The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR (<a href="#">BUF041A/B</a>).</p>
<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>Nair, M.G. <i>et al.</i> (2009) Alternatively activated macrophage-derived RELM-<math>\alpha</math> is a negative regulator of type 2 inflammation in the lung. <a href="#">J Exp Med. 206: 937-52.</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> </ol>

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**Storage**

Prior to reconstitution store at +4°C.

After reconstitution store at +4°C.

DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #20487 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA2235PET>  
20487

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:RPE \(MCA1212PE\)](#)

### Recommended Useful Reagents

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

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

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