

## Datasheet: MCA2235B

**BATCH NUMBER 173786**

<b>Description:</b>	RAT ANTI MOUSE CD206:Biotin
<b>Specificity:</b>	CD206
<b>Other names:</b>	MANNOSE RECEPTOR C TYPE 1
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MR5D3
<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 (1)	▪			Neat - 1/10

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. 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 biotin - 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>	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin
<b>Approx. Protein</b>	IgG concentration 0.1 mg/ml

## Concentrations

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**Immunogen** Chimaeric CRD4-7-Fc protein

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## External Database Links

### UniProt:

[Q61830](#) [Related reagents](#)

### Entrez Gene:

[17533](#) Mrc1 [Related reagents](#)

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**RRID** AB\_323868

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**Fusion Partners** Spleen cells from immunized Fischer rats were fused with cells of the Y3 myeloma cell line

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**Specificity** **Rat anti Mouse CD206 antibody, clone MR5D3** 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 *in vitro* derived dendritic cells ([Zamze et al. 2002](#)).

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 ([Su et al. 2005](#)).

Rat anti mouse CD206 antibody, clone MR5D3 has been reported to be non-inhibitory for the binding of the mannose receptor to carbohydrate ligands ([Zamze et al. 2002](#)). Clone MR5D3 has also been shown to work in western blotting ([Martinez-Pomares et al. 2003](#) and [Su et al. 2005](#)).

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**Flow Cytometry** 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 ([BUF041A/BUF041B](#)).

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- References**
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- by modulating immune cell subsets and intramuscular TGF-beta. [J Clin Invest. 119: 1583-94.](#)
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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 #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2235B>

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## Related Products

### Recommended Useful Reagents

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

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

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