

# Datasheet: MCA2235F BATCH NUMBER 147846

Description:	RAT ANTI MOUSE CD206:FITC
Specificity:	CD206
Other names:	MANNOSE RECEPTOR C TYPE 1
Format:	FITC
<b>Product Type:</b>	Monoclonal Antibody
Clone:	MR5D3
Isotype:	lgG2a
Quantity:	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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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<sup>™</sup> (Product Code <u>BUF09</u>) for this purpose.

Target Species	Mouse		
Product Form	Purified IgG conju	ugated to Fluorescein Isoth	niocyanate Isomer 1
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prep supernatant	ared by affinity chromatog	raphy on Protein G t
Buffer Solution	Phosphate buffer	red saline	
Preservative	0.09% Sodium A	zide	

Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Chimaeric CRD4-7-Fc protein
External Database Links	UniProt:  Q61830 Related reagents  Entrez Gene:  17533 Mrc1 Related reagents
RRID	AB_324594
Fusion Partners	Spleen cells from immunised Fischer rats were fused with cells of the Y3 myeloma cell line
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 <i>in vitro</i> 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).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
	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 ( <u>BUF041A/B</u> ).
References	<ol> <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. <u>J Leukoc Biol. 73 (5): 604-13.</u></li> <li>Nair, M.G. <i>et al.</i> (2009) Alternatively activated macrophage-derived RELM-{alpha} is a negative regulator of type 2 inflammation in the lung. <u>J Exp Med. 206: 937-52.</u></li> </ol>

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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. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2235F">https://www.bio-rad-antibodies.com/SDS/MCA2235F</a> 10041
Regulatory	For research purposes only

# Related Products

## **Recommended Negative Controls**

RAT IgG2a NEGATIVE CONTROL:FITC (MCA1212F)

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North & South Tel: +1 800 265 7376 Fax: +1 919 878 3751 Worldwide

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