Datasheet: MCA2235PB

BATCH NUMBER 1612

Description:	RAT ANTI MOUSE CD206:Pacific Blue®
Specificity:	CD206
Other names:	MANNOSE RECEPTOR C TYPE 1
Format:	Pacific Blue®
Product Type:	Monoclonal Antibody
Clone:	MR5D3
Isotype:	IgG2a
Quantity:	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.

	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. Bio-Rad recommends the use of Leucoperm™ (Product Code BUF09) for this purpose.**

Target Species

Mouse

Product Form

Purified IgG conjugated to Pacific Blue - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Pacific Blue®	410	455

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative

0.09% Sodium Azide

Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	Chimaeric CRD4-7-Fc protein
External Database Links	**UniProt:** Q61830 Related reagents **Entrez Gene:** 17533 Mrc1 Related reagents
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 *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).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 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 (BUF041A/B).
References	1. Martinez-Pomares, L. *et al.* (2003) Analysis of mannose receptor regulation by IL-4, IL-10, and proteolytic processing using novel monoclonal antibodies. J Leukoc Biol. 73 (5): 604-13. 2. Nair, M.G. *et al.* (2009) Alternatively activated macrophage-derived RELM-{alpha} is a negative regulator of type 2 inflammation in the lung. J Exp Med. 206: 937-52. 3. Hassan, M.F. *et al.* (2006) The *Schistosoma mansoni* hepatic egg granuloma provides a favorable microenvironment for sustained growth of *Leishmania donovani.* Am J Pathol. 169: 943-53. 4. Hardison, S.E. *et al.* (2010) Interleukin-17 Is Not Required for Classical Macrophage

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Storage	Store at +4ºC or at -20ºC 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
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2235PB 10041
Regulatory	For research purposes only

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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