Datasheet: MCA2235BT

**Description:** RAT ANTI MOUSE CD206:Biotin

**Specificity:** CD206

**Other names:** MANNOSE RECEPTOR C TYPE 1

**Format:** Biotin

**Product Type:** Monoclonal Antibody

**Clone:** MR5D3

**Isotype:** IgG2a

**Quantity:** 25 µg

**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).

<table>
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<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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<tr>
<td>Flow Cytometry</td>
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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.

**Target Species**

Mouse

**Product Form**

Purified IgG conjugated to Biotin - liquid

**Preparation**

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

**Buffer Solution**

Phosphate buffered saline

**Preservative Stabilisers**

0.09% Sodium Azide

1% Bovine Serum Albumin

**Approx. Protein Concentrations**

IgG concentration 0.1 mg/ml

**Immunogen**

Chimaeric CRD4-7-Fc protein

**External Database Links**

UniProt: [Q61830](http://www.uniprot.org/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 Blot (Martinez-Pomares et al. 2003 and Su et al. 2005).

**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10⁶ 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**

Pathol. 176: 774-85.


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

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<th>Shelf Life</th>
<th>18 months from date of despatch.</th>
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<th>Health And Safety Information</th>
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<tr>
<td>Material Safety Datasheet Documentation #10041 available at:</td>
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<tr>
<th>Regulatory</th>
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<tr>
<td>For research purposes only</td>
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**Related Products**

**Recommended Secondary Antibodies**

STREPTAVIDIN (STAR119...) *APC*

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