Datasheet: MCA2235A647

**Description:** RAT ANTI MOUSE CD206: Alexa Fluor® 647

**Specificity:** CD206

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

**Format:** ALEXA FLUOR® 647

**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](http://www.bio-rad-antibodies.com/protocols).

<table>
<thead>
<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry (1)</td>
<td>-</td>
<td></td>
<td></td>
<td>Neat</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 Alexa Fluor® 647 - liquid

**Max Ex/Em**

<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Excitation (nm)</th>
<th>Emission (nm)</th>
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<tbody>
<tr>
<td>Alexa Fluor® 647</td>
<td>650</td>
<td>665</td>
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</table>

**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 0.05 mg/ml

**Immunogen**

Chimaeric CRD4-7-Fc protein
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 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

10. Dewals, B.G. *et al.* (2010) IL-4Ralpha-independent expression of mannose receptor and

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.

Shelf Life

18 months from date of despatch.

Acknowledgements

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Health And Safety

Information


Regulatory

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