

Datasheet: MCA2235A647

**BATCH NUMBER 173913**

|                      |                                       |
|----------------------|---------------------------------------|
| <b>Description:</b>  | RAT ANTI MOUSE CD206:Alexa Fluor® 647 |
| <b>Specificity:</b>  | CD206                                 |
| <b>Other names:</b>  | MANNOSE RECEPTOR C TYPE 1             |
| <b>Format:</b>       | ALEXA FLUOR® 647                      |
| <b>Product Type:</b> | Monoclonal Antibody                   |
| <b>Clone:</b>        | MR5D3                                 |
| <b>Isotype:</b>      | IgG2a                                 |
| <b>Quantity:</b>     | 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).

|                    | 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.**

|                        |                                                                                               |                            |                          |
|------------------------|-----------------------------------------------------------------------------------------------|----------------------------|--------------------------|
| <b>Target Species</b>  | Mouse                                                                                         |                            |                          |
| <b>Product Form</b>    | Purified IgG conjugated to Alexa Fluor® 647 - liquid                                          |                            |                          |
| <b>Max Ex/Em</b>       | <b>Fluorophore</b>                                                                            | <b>Excitation Max (nm)</b> | <b>Emission Max (nm)</b> |
|                        | Alexa Fluor®647                                                                               | 650                        | 665                      |
| <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</b>    | 0.09% sodium azide (NaN <sub>3</sub> )                                                        |                            |                          |

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stabilisers                    | 1% bovine serum albumin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Approx. Protein Concentrations | IgG concentration 0.05 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Immunogen                      | Chimaeric CRD4-7-Fc protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| External Database Links        | <p><b>UniProt:</b><br/> <a href="#">Q61830</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">17533</a>    Mrc1    <a href="#">Related reagents</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| RRID                           | AB_324890                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Fusion Partners                | Spleen cells from immunized Fischer rats were fused with cells of the Y3 myeloma cell line                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Specificity                    | <p><b>Rat anti Mouse CD206 antibody, clone MR5D3</b> 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 (<a href="#">Zamze et al. 2002</a>).</p> <p>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 (<a href="#">Su et al. 2005</a>).</p> <p>Rat anti mouse CD206 antibody, clone MR5D3 has been reported to be non-inhibitory for the binding of the mannose receptor to carbohydrate ligands (<a href="#">Zamze et al. 2002</a>). Clone MR5D3 has also been shown to work in western blotting (<a href="#">Martinez-Pomares et al. 2003</a> and <a href="#">Su et al. 2005</a>).</p> |
| Flow Cytometry                 | <p>Use 10µl of the suggested working dilution to label 10<sup>6</sup> cells in 100µl.</p> <p>The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (<a href="#">BUF041A</a>/<a href="#">BUF041B</a>).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| References                     | <ol style="list-style-type: none"> <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. <a href="#">J Leukoc Biol. 73 (5): 604-13.</a></li> <li>Su, Y. <i>et al.</i> (2005) Glycosylation influences the lectin activities of the macrophage mannose receptor. <a href="#">J Biol Chem. 280: 32811-20.</a></li> <li>Hassan, M.F. <i>et al.</i> (2006) The <i>Schistosoma mansoni</i> hepatic egg granuloma provides a favorable microenvironment for sustained growth of <i>Leishmania donovani</i>. <a href="#">Am J Pathol. 169: 943-53.</a></li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Guarantee                     | 12 months from date of despatch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| Regulatory                    | For research purposes only                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Related Products

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA1212A647\)](#)

Product inquiries: [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)  
'M413420:221122'

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