# Datasheet: MCA342A647

## BATCH NUMBER 161747

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|---|---|
| **Description:** | MOUSE ANTI RAT CD163:Alexa Fluor® 647 |
| **Specificity:** | CD163 |
| **Other names:** | ED2 |
| **Format:** | ALEXA FLUOR® 647 |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | ED2 |
| **Isotype:** | IgG1 |
| **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 | ▪ | | | Neat - 1/10 |

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 in their own system using appropriate negative/positive controls.

**Target Species**

Rat

**Product Form**

Purified IgG conjugated to Alexa Fluor® 647 - liquid

**Max Ex/Em**

| Fluorophore | Excitation Max (nm) | Emission Max (nm) |
|---|---|---|
| Alexa Fluor®647 | 650 | 665 |

**Preparation**

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

**Buffer Solution**

Phosphate buffered saline

**Preservative Stabilisers**

0.09% Sodium Azide
1% Bovine Serum Albumin

**Approx. Protein**

IgG concentration 0.05 mg/ml

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|---|---|
| **Concentrations** | |
| **Immunogen** | Rat spleen cell homogenate. |
| **RRID** | AB_2074557 |
| **Fusion Partners** | Spleen cells from immunized BALB/c mice were fused with cells of the SP2/0-Ag 14 mouse myeloma cell line. |
| **Specificity** | **Mouse anti Rat CD163, clone ED2** recognizes the rat ED2 cell surface glycoprotein (Dijkstra *et al.* 1985). A 175 kDa molecule also known as rat CD163, a member of the group B scavenger receptor cysteine-rich (SRCR) family and an erythroblast adhesion receptor (Fabriek *et al.* 2007).<br><br>Mouse anti rat CD163, clone ED2 was shown to detect approximately 50% of peritoneal macrophages, a subset of splenic macrophages, and most tissue macrophages. However, no staining was observed in monocytes or alveolar macrophages (Dijkstra *et al.* 1985, Beelen *et al.* 1987). In freshly isolated bone marrow, expression of CD163 was limited to mature macrophages only (Barbe *et al.* 1990).<br><br>Clone ED2 may be used in immunohistology using antigen retrieval, and has also been described reacting with paraffin-embedded material following PLP fixation (Periodate-lysine-paraformaldehyde), see Whiteland *et al.* |
| **Flow Cytometry** | Use 10ul of the suggested working dilution to label $10^6$ cells in 100ul |
| **References** | 1. Barbe, E. *et al.* (1990) Characterization and expression of the antigen present on resident rat macrophages recognized by monoclonal antibody ED2. Immunobiol. 182: 88-99.<br>2. Dijkstra, C.D. & Damoiseaux, J.G. (1993) Macrophage heterogeneity established by immunocytochemistry. Prog Histochem Cytochem. 27 (2): 1-65.<br>3. Whiteland, J.L. *et al.* (1995) Immunohistochemical detection of T-cell subsets and other leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. J Histochem Cytochem. 43 (3): 313-20.<br>4. Muller, D.N. *et al.* (2002) Immunosuppressive treatment protects against angiotensin II-induced renal damage. Am J Pathol. 161: 1679-93.<br>5. Polfliet, M.M.J. *et al.* (2002) Identification of the rat mature macrophage antigen ED2 as CD163: Regulation by glucocorticoids and role in the production of proinflammatory mediators. PhD Thesis. Vrije University, Amsterdam.<br>6. Banerjee, S. *et al.* (2003) Development of organised conjunctival leucocyte aggregates after corneal transplantation in rats. Br J Ophthalmol. 87: 1515-22.<br>7. Moghaddami, M. *et al.* (2005) MHC class II compartment, endocytosis and phagocytic activity of macrophages and putative dendritic cells isolated from normal tissues rich in synovium. Int Immunol. 17: 1117-30.<br>8. Ghiringhelli, F. *et al.* (2005) Tumor cells convert immature myeloid dendritic cells into TGF-beta-secreting cells inducing CD4+CD25+ regulatory T cell proliferation. J Exp Med. 202: 919-29.<br>9. Deng, X. *et al.* (2005) Chronic alcohol consumption accelerates fibrosis in response to |

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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.

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|---|---|
| | 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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| **Health And Safety Information** | Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA342A647<br>10041 |
| **Regulatory** | For research purposes only |

## Related Products

### Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 (MCA1209A647)


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|---|---|---|---|---|---|
| **North & South America** | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>Email: antibody_sales_us@bio-rad.com | **Worldwide** | Tel: +44 (0)1865 852 700<br>Fax: +44 (0)1865 852 739<br>Email: antibody_sales_uk@bio-rad.com | **Europe** | Tel: +49 (0) 89 8090 95 21<br>Fax: +49 (0) 89 8090 95 50<br>Email: antibody_sales_de@bio-rad.com |


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