

Datasheet: MCA275FA

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| Description: | MOUSE ANTI RAT CD11b:FITC |
| Specificity: | CD11b |
| Other names: | INTEGRIN ALPHA M CHAIN, MAC-1 |
| Format: | FITC |
| Product Type: | Monoclonal Antibody |
| Clone: | OX-42 |
| Isotype: | IgG2a |
| Quantity: | 50 µg |

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 | ▪ | | | |

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.

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|---------------------------------------|---|----------------------------|--------------------------|
| Target Species | Rat | | |
| Product Form | Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid. | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | FITC | 490 | 525 |
| 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 0.1 mg/ml | | |

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|------------------------|---|
| Immunogen | Resident rat peritoneal macrophages. |
| RRID | AB_2129486 |
| Fusion Partners | Spleen cells from immunised BALB/c mice were fused with cells of the NSO/U mouse myeloma cell line. |
| Specificity | <p>Mouse anti Rat CD11b, clone OX-42, recognizes rat CD11b, also known as integrin alpha-M, the receptor for the iC3b component of complement. CD11b is a 1151 amino acid single pass type 1 transmembrane glycoprotein possessing a single vWFA domain and multiple FG-GAP repeats. CD11b is expressed on most macrophages, including resident and activated peritoneal macrophages and Kupffer cells and around 35% of alveolar macrophages. The antibody also labels dendritic cells, granulocytes and microglia in the brain (Robinson et al.1986).</p> <p>Mouse anti Rat CD11b, clone OX-42 is reported to inhibit complement mediated rosettes (Robinson et al.1986) as well as inhibit myelin binding and uptake (van der Laan et al.1996).</p> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul. |
| References | <ol style="list-style-type: none"> 1. Robinson, A.P. <i>et al.</i> (1986) Macrophage heterogeneity in the rat as delineated by two monoclonal antibodies MRC OX-41 and MRC OX-42, the latter recognizing complement receptor type 3. Immunology. 57 (2): 239-47. 2. Barclay, A.N. (1981) The localization of population of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. Immunology. 42: 593-600. 3. Milligan, C.E. <i>et al.</i> (1991) Differential immunochemical markers reveal the normal distribution of brain macrophages and microglia in the developing rat brain. J Comp Neurol. 314 (1): 125-35. 4. Whiteland, J.L. <i>et al.</i> (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. 5. Zilka, N. <i>et al.</i> (2009) Human misfolded truncated tau protein promotes activation of microglia and leukocyte infiltration in the transgenic rat model of tauopathy. J Neuroimmunol. 209 (1-2): 16-25. 6. Shokouhi, B.N. <i>et al.</i> (2010) Microglial responses around intrinsic CNS neurons are correlated with axonal regeneration. BMC Neurosci. 11: 13. 7. Calvo, M. <i>et al.</i> (2010) Neuregulin-ErbB signaling promotes microglial proliferation and chemotaxis contributing to microgliosis and pain after peripheral nerve injury. J Neurosci. 30 (15): 5437-50. 8. Jean, Y.H. <i>et al.</i> (2009) Capnellene, a natural marine compound derived from soft coral, attenuates chronic constriction injury-induced neuropathic pain in rats Br J Pharmacol. 158: 713-25. 9. Morales-Garcia, J.A. <i>et al.</i> (2011) Phosphodiesterase 7 inhibition preserves dopaminergic neurons in cellular and rodent models of Parkinson disease. PLoS One. 6(2):e17240. 10. Spencer-Segal, J.L. <i>et al.</i> (2011) Distribution of Phosphorylated TrkB Receptor in the |

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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

Health And Safety Information Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:FITC \(MCA1210F\)](#)

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