

Datasheet: MCA275PE

BATCH NUMBER 1015

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|----------------------|-------------------------------|
| Description: | MOUSE ANTI RAT CD11b:RPE |
| Specificity: | CD11b |
| Other names: | INTEGRIN ALPHA M CHAIN, MAC-1 |
| Format: | RPE |
| Product Type: | Monoclonal Antibody |
| Clone: | OX-42 |
| Isotype: | IgG2a |
| Quantity: | 100 TESTS |

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 |

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 R. Phycoerythrin (RPE) - lyophilized | | |
| Reconstitution | Reconstitute with 1 ml distilled water | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | RPE 488nm laser | 496 | 578 |
| Preparation | Purified IgG prepared by ion exchange chromatography | | |
| Buffer Solution | Phosphate buffered saline | | |
| Preservative Stabilisers | 0.09% Sodium Azide | | |
| | 1% | Bovine Serum Albumin | |
| | 5% | Sucrose | |

| | |
|------------------------|--|
| Immunogen | Resident rat peritoneal macrophages. |
| RRID | AB_321304 |
| 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 Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA275PE>
20487

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:RPE \(MCA1210PE\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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