

Datasheet: MCA275PB

BATCH NUMBER 163086

Description:	MOUSE ANTI RAT CD11b:Pacific Blue®
Specificity:	CD11b
Other names:	INTEGRIN ALPHA M CHAIN, MAC-1
Format:	Pacific Blue®
Product Type:	Monoclonal Antibody
Clone:	OX-42
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.

	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 Pacific Blue® - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Pacific Blue®	410	455
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein	IgG concentration 0.05 mg/ml		

Concentrations

Immunogen Resident rat peritoneal macrophages.

RRID AB_566459

Fusion Partners Spleen cells from immunized BALB/c mice were fused with cells of the NSO/U mouse myeloma cell line.

Specificity **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](#)).

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](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

References

1. Robinson, A.P. *et al.* (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. Milligan, C.E. *et al.* (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.](#)
3. Yrjanheikki, J. *et al.* (1999) A tetracycline derivative, minocycline, reduces inflammation and protects against focal cerebral ischemia with a wide therapeutic window. [Proc Natl Acad Sci U S A. 96: 13496-500.](#)
4. Draskovic-Pavlovic, B. *et al.* (1999) Differential effects of anti-rat CD11b monoclonal antibodies on granulocyte adhesiveness. [Immunology. 96: 83-9.](#)
5. Kielian, T. and Hickey, W.F. (2000) Proinflammatory cytokine, chemokine, and cellular adhesion molecule expression during the acute phase of experimental brain abscess development. [Am J Pathol. 157: 647-58.](#)
6. Choi, S.H. *et al.* (2003) Thrombin-induced microglial activation produces degeneration of nigral dopaminergic neurons *in vivo*. [J Neurosci. 23: 5877-86.](#)
7. Bruce-Keller, A.J. *et al.* (2003) Synaptic transport of human immunodeficiency virus-Tat protein causes neurotoxicity and gliosis in rat brain. [J Neurosci. 23: 8417-22.](#)
8. Jin, S.X. *et al.* (2003) p38 mitogen-activated protein kinase is activated after a spinal nerve ligation in spinal cord microglia and dorsal root ganglion neurons and contributes to the generation of neuropathic pain. [J Neurosci. 23: 4017-22.](#)
9. Walczak, P. *et al.* (2004) Do hematopoietic cells exposed to a neurogenic environment mimic properties of endogenous neural precursors? [J Neurosci Res. 76: 244-54.](#)
10. Stidworthy, M.F. *et al.* (2004) Notch1 and Jagged1 are expressed after CNS demyelination, but are not a major rate-determining factor during remyelination. [Brain.](#)

[127: 1928-41.](#)

11. Foote, A.K. and Blakemore, W.F. (2005) Inflammation stimulates remyelination in areas of chronic demyelination. [Brain. 128: 528-39.](#)
12. Jha, P. *et al.* (2006) The complement system plays a critical role in the development of experimental autoimmune anterior uveitis. [Invest Ophthalmol Vis Sci. 47: 1030-8.](#)
13. Clark, A.K. *et al.* (2007) Inhibition of spinal microglial cathepsin S for the reversal of neuropathic pain. [Proc Natl Acad Sci U S A. 104: 10655-60.](#)
14. Fendrick, S.E. *et al.* (2007) Formation of multinucleated giant cells and microglial degeneration in rats expressing a mutant Cu/Zn superoxide dismutase gene. [J Neuroinflammation. 4: 9.](#)
15. Ji, B. *et al.* (2008) Imaging of peripheral benzodiazepine receptor expression as biomarkers of detrimental versus beneficial glial responses in mouse models of Alzheimer's and other CNS pathologies. [J Neurosci. 28: 12255-67.](#)
16. Jean, Y.H. *et al.* (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.](#)
17. Leonardo, C.C. *et al.* (2009) Inhibition of gelatinase activity reduces neural injury in an *ex vivo* model of hypoxia-ischemia. [Neuroscience. 160: 755-66.](#)
18. Jin, Y. *et al.* (2009) Mast cells are early responders after hypoxia-ischemia in immature rat brain. [Stroke. 40: 3107-12.](#)
19. Baca Jones, C.C. (2009) Rat cytomegalovirus infection depletes MHC II in bone marrow derived dendritic cells. [Virology. 388: 78-90.](#)
20. Schlichter, L.C. *et al.* (2010) The Ca²⁺ activated SK3 channel is expressed in microglia in the rat striatum and contributes to microglia-mediated neurotoxicity *in vitro*. [J Neuroinflammation. 7: 4.](#)
21. Pickard, M.R. and Chari, D.M. (2010) Robust uptake of magnetic nanoparticles (MNPs) by central nervous system (CNS) microglia: Implications for particle uptake in mixed neural cell populations. [Int J Mol Sci. 11: 967-81.](#)
22. Medders, K.E. *et al.* (2010) Activation of p38 MAPK is required in monocytic and neuronal cells for HIV glycoprotein 120-induced neurotoxicity. [J Immunol. 185: 4883-95.](#)
23. Li, K. *et al.* (2010) Systemic minocycline differentially influences changes in spinal microglial markers following formalin-induced nociception. [J Neuroimmunol. 221: 25-31.](#)
24. Su, D. *et al.* (2010) Lidocaine attenuates proinflammatory cytokine production induced by extracellular adenosine triphosphate in cultured rat microglia. [Anesth Analg. 111: 768-74.](#)
25. Jokic, N. *et al.* (2010) The human G93A-SOD1 mutation in a pre-symptomatic rat model of amyotrophic lateral sclerosis increases the vulnerability to a mild spinal cord compression. [BMC Genomics. 11: 633.](#)
26. Zhou, D. *et al.* (2010) Involvement of spinal microglial P2X7 receptor in generation of tolerance to morphine analgesia in rats. [J Neurosci. 30: 8042-7.](#)
27. Smith, J.S. *et al.* (2010) Role of Early Surgical Decompression of the Intradural Space After Cervical Spinal Cord Injury in an Animal Model [J Bone Joint Surg Am. 92: 1206-14.](#)
28. Jiang, Y. *et al.* (2010) Effects of brain-derived neurotrophic factor on local inflammation in experimental stroke of rat. [Mediators Inflamm. 2010: 372423.](#)
29. Graber, D.J. *et al.* (2010) Progressive changes in microglia and macrophages in spinal cord and peripheral nerve in the transgenic rat model of amyotrophic lateral sclerosis. [J Neuroinflammation. 7: 8.](#)

30. Jeong, H.K. *et al.* (2010) Inflammatory responses are not sufficient to cause delayed neuronal death in ATP-induced acute brain injury. [PLoS One. 5: e13756.](#)
31. Wu, J. *et al.* (2010) Interaction of NG2(+) glial progenitors and microglia/macrophages from the injured spinal cord. [Glia. 58: 410-22.](#)
32. Guo, W. *et al.* (2010) Long lasting pain hypersensitivity following ligation of the tendon of the masseter muscle in rats: a model of myogenic orofacial pain. [Mol Pain. 6: 40.](#)
33. Shokouhi, B.N. *et al.* (2010) Microglial responses around intrinsic CNS neurons are correlated with axonal regeneration. [BMC Neurosci. 11: 13.](#)
34. Calvo, M. *et al.* (2010) Neuregulin-ErbB signaling promotes microglial proliferation and chemotaxis contributing to microgliosis and pain after peripheral nerve injury. [J Neurosci. 30 \(15\): 5437-50.](#)
35. Chew, S.S. *et al.* (2011) Response of retinal Connexin43 to optic nerve injury. [Invest Ophthalmol Vis Sci. 52: 3620-9.](#)
36. Spencer-Segal, J.L. *et al.* (2011) Distribution of Phosphorylated TrkB Receptor in the Mouse Hippocampal Formation Depends on Sex and Estrous Cycle Stage. [J Neurosci. 31: 6780-90.](#)
37. Converse, A.K. *et al.* (2011) 11C-(R)-PK11195 PET imaging of microglial activation and response to minocycline in zymosan-treated rats. [J Nucl Med. 52: 257-62.](#)
38. Feng, Y. *et al.* (2011) Gene expression profiling of vasoregression in the retina--involvement of microglial cells. [PLoS One. 6\(2\): e16865.](#)
39. Szmydynger-Chodobska, J. *et al.* (2011) Multiple sites of vasopressin synthesis in the injured brain. [J Cereb Blood Flow Metab. 31: 47-51.](#)
40. Toda, S. *et al.* (2011) A local anesthetic, ropivacaine, suppresses activated microglia via a nerve growth factor-dependent mechanism and astrocytes via a nerve growth factor-independent mechanism in neuropathic pain. [Mol Pain. 7: 2.](#)
41. Xu, Q. *et al.* (2011) Spinal phosphoinositide 3-kinase-Akt-mammalian target of rapamycin signaling cascades in inflammation-induced hyperalgesia. [J Neurosci. 31: 2113-24.](#)
42. Morales-Garcia, J.A. *et al.* (2011) Phosphodiesterase 7 inhibition preserves dopaminergic neurons in cellular and rodent models of Parkinson disease. [PLoS One. 6\(2\):e17240.](#)
43. Signarovitz, A.L. *et al.* (2012) Mucosal immunization with live attenuated *Francisella novicida* U112ΔiglB protects against pulmonary *F. tularensis* SCHU S4 in the Fischer 344 rat model. [PLoS One. 7: e47639.](#)
44. Ortega, F.J. *et al.* (2012) Glibenclamide enhances neurogenesis and improves long-term functional recovery after transient focal cerebral ischemia. [J Cereb Blood Flow Metab. 33: 356-64.](#)
45. Lavis, S. *et al.* (2012) Reactive astrocytes overexpress TSPO and are detected by TSPO positron emission tomography imaging. [J Neurosci. 32: 10809-18.](#)
46. Schonberg, D.L. *et al.* (2012) Ferritin stimulates oligodendrocyte genesis in the adult spinal cord and can be transferred from macrophages to NG2 cells *in vivo*. [J Neurosci. 32: 5374-84.](#)
47. d'Avila, J.C. *et al.* (2012) Microglial activation induced by brain trauma is suppressed by post-injury treatment with a PARP inhibitor. [J Neuroinflammation. 9: 31.](#)
48. Lovett-Barr, M.R. *et al.* (2012) Repetitive intermittent hypoxia induces respiratory and somatic motor recovery after chronic cervical spinal injury. [J Neurosci. 32 \(11\): 3591-600.](#)
49. Tchoukalova, Y.D. *et al.* (2012) *In vivo* adipogenesis in rats measured by cell kinetics

- in adipocytes and plastic-adherent stroma-vascular cells in response to high-fat diet and thiazolidinedione. [Diabetes. 61: 137-44.](#)
50. Zhang, Z.J. *et al.* (2012) Chemokine CCL2 and its receptor CCR2 in the medullary dorsal horn are involved in trigeminal neuropathic pain. [J Neuroinflammation. 9: 136.](#)
51. Liew, H.K. *et al.* (2012) Systemic administration of urocortin after intracerebral hemorrhage reduces neurological deficits and neuroinflammation in rats. [J Neuroinflammation. 9: 13.](#)
52. de Sousa, É *et al.* (2013) Developmental and functional expression of miRNA-stability related genes in the nervous system. [PLoS One. 8 \(5\): e56908.](#)
53. Zhao, H. *et al.* (2013) Brain 3-Mercaptopyruvate Sulfurtransferase (3MST): Cellular Localization and Downregulation after Acute Stroke. [PLoS One. 8\(6\):e67322.](#)
54. Huang, S. *et al.* (2015) Expression of Peroxiredoxin 1 After Traumatic Spinal Cord Injury in Rats. [Cell Mol Neurobiol. 35 \(8\): 1217-26.](#)
55. Hernangómez M *et al.* (2016) CD200R1 agonist attenuates glial activation, inflammatory reactions, and hypersensitivity immediately after its intrathecal application in a rat neuropathic pain model. [J Neuroinflammation. 13 \(1\): 43.](#)
56. Szmydynger-Chodobska, J. *et al.* (2016) The Involvement of Pial Microvessels in Leukocyte Invasion after Mild Traumatic Brain Injury. [PLoS One. 11 \(12\): e0167677.](#)
57. Liu, Z. *et al.* (2016) Leukocyte Infiltration Triggers Seizure Recurrence in a Rat Model of Temporal Lobe Epilepsy. [Inflammation. 39 \(3\): 1090-8.](#)
58. Chen, X. *et al.* (2017) TGF- β 1 Neuroprotection via Inhibition of Microglial Activation in a Rat Model of Parkinson's Disease. [J Neuroimmune Pharmacol. 12 \(3\): 433-46.](#)
59. Popielek-Barczyk, K. *et al.* (2017) Biphalin, a Dimeric Enkephalin, Alleviates LPS-Induced Activation in Rat Primary Microglial Cultures in Opioid Receptor-Dependent and Receptor-Independent Manners. [Neural Plast. 2017: 3829472.](#)
60. Huang RY *et al.* (2017) Rapid and Delayed Effects of Pulsed Radiofrequency on Neuropathic Pain: Electrophysiological, Molecular, and Behavioral Evidence Supporting Long-Term Depression. [Pain Physician. 20 \(2\): E269-E283.](#)
61. Chong, S.A. *et al.* (2018) Intrinsic Inflammation Is a Potential Anti-Epileptogenic Target in the Organotypic Hippocampal Slice Model. [Neurotherapeutics. 15 \(2\): 470-88.](#)
62. Terayama, R. *et al.* (2018) A₃ adenosine receptor agonist attenuates neuropathic pain by suppressing activation of microglia and convergence of nociceptive inputs in the spinal dorsal horn. [Exp Brain Res. 236 \(12\): 3203-13.](#)
63. Sanches, E.F. *et al.* (2018) Brain Metabolism Alterations Induced by Pregnancy Swimming Decreases Neurological Impairments Following Neonatal Hypoxia-Ischemia in Very Immature Rats. [Front Neurol. 9: 480.](#)
64. Collins, J.J.P. *et al.* (2018) Impaired Angiogenic Supportive Capacity and Altered Gene Expression Profile of Resident CD146⁺ Mesenchymal Stromal Cells Isolated from Hyperoxia-Injured Neonatal Rat Lungs. [Stem Cells Dev. 27 \(16\): 1109-24.](#)
65. Wang, Z.C. *et al.* (2018) Involvement of NF- κ B and the CX3CR1 Signaling Network in Mechanical Allodynia Induced by Tetanic Sciatic Stimulation. [Neurosci Bull. 34 \(1\): 64-73.](#)
66. Bourke, G. *et al.* (2018) Effects of early nerve repair on experimental brachial plexus injury in neonatal rats. [J Hand Surg Eur Vol. 43 \(3\): 275-81.](#)
67. Yuan, Z. *et al.* (2019) The anti-inflammatory effect of minocycline on endotoxin-induced uveitis and retinal inflammation in rats. [Mol Vis. 25: 359-72.](#)
68. Hansson, E. & Skiöldebrand, E. (2019) Anti-inflammatory effects induced by ultralow concentrations of bupivacaine in combination with ultralow concentrations of sildenafil

- (Viagra) and vitamin D3 on inflammatory reactive brain astrocytes. [PLoS One. 14 \(10\): e0223648.](#)
69. Muratori, L. *et al.* (2019) New basic insights on the potential of a chitosan-based medical device for improving functional recovery after radical prostatectomy. [BJU Int. 124 \(6\): 1063-76.](#)
70. Hahm, S.C. *et al.* (2019) Transcutaneous Electrical Nerve Stimulation Reduces Knee Osteoarthritic Pain by Inhibiting Spinal Glial Cells in Rats. [Phys Ther. 99 \(9\): 1211-23.](#)
71. Hellenbrand, D.J. *et al.* (2019) Sustained interleukin-10 delivery reduces inflammation and improves motor function after spinal cord injury. [J Neuroinflammation. 16 \(1\): 93.](#)
72. Sugama, S. *et al.* (2019) Stress-induced microglial activation occurs through β -adrenergic receptor: noradrenaline as a key neurotransmitter in microglial activation. [J Neuroinflammation. 16 \(1\): 266.](#)
73. Anqi, X. *et al.* (2019) Neuroprotective potential of GDF11 in experimental intracerebral hemorrhage in elderly rats. [J Clin Neurosci. 63: 182-8.](#)
74. Klemm, P. *et al.* (2019) Hypothermia protects retinal ganglion cells against hypoxia-induced cell death in a retina organ culture model. [Clin Exp Ophthalmol. 47 \(8\): 1043-54.](#)
75. Allendorf, D.H. *et al.* (2020) Activated microglia desialylate their surface, stimulating complement receptor 3-mediated phagocytosis of neurons. [Glia. 68 \(5\): 989-998.](#)
76. Cohrs, G. *et al.* (2020) Expression Patterns of Hypoxia-Inducible Factors, Proinflammatory, and Neuroprotective Cytokines in Neuroepithelial Tissues of Lumbar Spinal Lipomas-A Pilot Study. [World Neurosurg. 141: e633-e644.](#)
77. Lin, J. *et al.* (2020) Protective effect of Soluble Epoxide Hydrolase Inhibition in Retinal Vasculopathy associated with Polycystic Kidney Disease. [Theranostics. 10 \(17\): 7857-71.](#)
78. Memedovski, Z. *et al.* (2020) Classical and Alternative Activation of Rat Microglia Treated with Ultrapure *Porphyromonas gingivalis* Lipopolysaccharide *In Vitro.* [Toxins \(Basel\). 12\(5\): 333.](#)
79. Espinosa-Garcia, C. *et al.* (2020) Progesterone Attenuates Stress-Induced NLRP3 Inflammasome Activation and Enhances Autophagy following Ischemic Brain Injury. [Int J Mol Sci. 21 \(11\): 3740.](#)
80. Tanaka, J. *et al.* (2020) Generation of CSF1-Independent Ramified Microglia-Like Cells from Leptomeninges *In Vitro.* [Cells. 10 \(1\): 24.](#)
81. van Vliet, E.A. (2020) Long-lasting blood-brain barrier dysfunction and neuroinflammation after traumatic brain injury [Neurobiol Dis 11:13.](#)
82. Mecha, M. *et al.* (2020) Involvement of Wnt7a in the role of M2c microglia in neural stem cell oligodendrogenesis. [J Neuroinflammation. 17 \(1\): 88.](#)
83. Chun, S. *et al.* (2021) The Peripheral Role of CCL2 in the Anti-Nociceptive Effect of Sigma-1 Receptor Antagonist BD1047 on Inflammatory Hyperalgesia in Rats. [Int J Mol Sci. 22\(21\):11730.](#)
84. Elabi, O.F. *et al.* (2021) L-dopa-Dependent Effects of GLP-1R Agonists on the Survival of Dopaminergic Cells Transplanted into a Rat Model of Parkinson Disease. [Int J Mol Sci. 22\(22\):12346.](#)
85. Zhang, J. *et al.* (2021) Significant higher-level C-C motif chemokine ligand 2/3 and chemotactic power in cerebral white matter than grey matter in rat and human. [Eur J Neurosci. 54 \(1\): 4088-100.](#)
86. Sato, T. *et al.* (2021) Distribution of alpha-synuclein in the rat cranial sensory ganglia, and oro-cervical regions. [Ann Anat. 238: 151776.](#)
87. Winkler, A. *et al.* (2021) Blood-brain barrier resealing in neuromyelitis optica occurs

- independently of astrocyte regeneration. [J Clin Invest. 131\(5\):e141694.](#)
88. Schnichels, S. *et al.* (2021) Cyclosporine A Protects Retinal Explants against Hypoxia. [Int J Mol Sci. 22 \(19\):10196.](#)
89. Valenzuela, R. *et al.* (2021) An ACE2/Mas-related receptor MrgE axis in dopaminergic neuron mitochondria. [Redox Biol. 46: 102078.](#)
90. Giuliano, C. *et al.* (2021) Neuroprotective and Symptomatic Effects of Cannabidiol in an Animal Model of Parkinson's Disease. [Int J Mol Sci. 22 \(16\): 8920.](#)
91. Hosoi, R. *et al.* (2021) Evaluation of intracellular processes in quinolinic acid-induced brain damage by imaging reactive oxygen species generation and mitochondrial complex I activity. [EJNMMI Res. 11 \(1\): 99.](#)
92. Szeredi, I.D. *et al.* (2021) Prior perineural or neonatal treatment with capsaicin does not alter the development of spinal microgliosis induced by peripheral nerve injury. [Cell Tissue Res. 383 \(2\): 677-92.](#)
93. Kuo, T.T. *et al.* (2021) Post-stroke Delivery of Valproic Acid Promotes Functional Recovery and Differentially Modifies Responses of Peri-Infarct Microglia. [Front Mol Neurosci. 14: 639145.](#)
94. Joya, A. *et al.* (2021) *In vivo* multimodal imaging of adenosine A₁ receptors in neuroinflammation after experimental stroke. [Theranostics. 11 \(1\): 410-25.](#)
95. Lane, E.L. *et al.* (2022) Spontaneous Graft-Induced Dyskinesias Are Independent of 5-HT Neurons and Levodopa Priming in a Model of Parkinson's Disease. [Mov Disord. 37 \(3\): 613-9.](#)
96. Kuter, K.Z. *et al.* (2022) The influence of preconditioning with low dose of LPS on paraquat-induced neurotoxicity, microglia activation and expression of α -synuclein and synphilin-1 in the dopaminergic system. [Pharmacol Rep. 74 \(1\): 67-83.](#)
97. Huang, S. *et al.* (2022) Hydrogen sulfide supplement preserves mitochondrial function of retinal ganglion cell in a rat glaucoma model. [Cell Tissue Res. 389 \(2\): 171-85.](#)
98. Dias, L. *et al.* (2022) A β ₁₋₄₂ peptides blunt the adenosine A_{2A} receptor-mediated control of the interplay between P₂X₇ and P₂Y₁ receptors mediated calcium responses in astrocytes. [Cell Mol Life Sci. 79 \(8\): 457.](#)
99. Andrioli, A. *et al.* (2022) Downregulation of the Astroglial Connexin Expression and Neurodegeneration after Pilocarpine-Induced Status Epilepticus. [Int J Mol Sci. 24 \(1\): 23.](#)
100. Li, H. *et al.* (2023) Cellular Localization and Distribution of TGF- β 1, GDNF and PDGF-BB in the Adult Primate Central Nervous System. [Neurochem Res. 48 \(8\): 2406-23.](#)
101. Li, Li-H. *et al.* (2023) Ovariectomy induces hyperalgesia accompanied by upregulated estrogen receptor α and protein kinase B in the rat spinal cord [Physiol Behav. 271:114342.](#)
102. Telianidis, J. *et al.* (2023) Inhibition of insulin-regulated aminopeptidase confers neuroprotection in a conscious model of ischemic stroke. [Sci Rep. 13 \(1\): 19722.](#)
103. Khayrullina, G. *et al.* (2023) Differential effects of NOX2 and NOX4 inhibition after rodent spinal cord injury. [PLoS One. 18 \(3\): e0281045.](#)
104. Moretti, M. *et al.* (2023) "Combo" Multi-Target Pharmacological Therapy and New Formulations to Reduce Inflammation and Improve Endogenous Remyelination in Traumatic Spinal Cord Injury. [Cells. 12 \(9\): 1331.](#)
105. Ameen, S.S. *et al.* (2023) N-Terminomic Changes in Neurons During Excitotoxicity Reveal Proteolytic Events Associated With Synaptic Dysfunctions and Potential Targets for Neuroprotection. [Mol Cell Proteomics. 22 \(5\): 100543.](#)

106. Sinha, S. *et al.* (2020) Maternal Spirulina supplementation during pregnancy and lactation partially prevents oxidative stress, glial activation and neuronal damage in protein malnourished F1 progeny. [Neurochem Int. 141: 104877.](#)
107. Huang, C.T. *et al.* (2018) Erythropoietin reduces nerve demyelination, neuropathic pain behavior and microglial MAPKs activation through erythropoietin receptors on Schwann cells in a rat model of peripheral neuropathy. [Glia. 66 \(11\): 2299-315.](#)
108. Routhe, L.J. *et al.* (2020) Astrocytic expression of ZIP14 (SLC39A14) is part of the inflammatory reaction in chronic neurodegeneration with iron overload. [Glia. 68 \(9\): 1810-23.](#)
109. Moriyama, M. *et al.* (2018) S-Equol, a Major Isoflavone from Soybean, Inhibits Nitric Oxide Production in Lipopolysaccharide-Stimulated Rat Astrocytes Partially via the GPR30-Mediated Pathway. [Int J Inflamm. 2018: 8496973.](#)
110. Jeon, M.T. *et al.* (2020) Neurotrophic interactions between neurons and astrocytes following AAV1-Rheb(S16H) transduction in the hippocampus *in vivo*. [Br J Pharmacol. 177 \(3\): 668-686.](#)
111. Li, X. *et al.* (2019) Magnesium sulfate attenuates brain edema by lowering AQP4 expression and inhibits glia-mediated neuroinflammation in a rodent model of eclampsia. [Behav Brain Res. 364: 403-12.](#)
112. Li, Q. *et al.* (2019) Spinal IL-36 γ /IL-36R participates in the maintenance of chronic inflammatory pain through astroglial JNK pathway. [Glia. 67 \(3\): 438-451.](#)
113. Baror, R. *et al.* (2019) Transforming growth factor-beta renders ageing microglia inhibitory to oligodendrocyte generation by CNS progenitors. [Glia. 67 \(7\): 1374-84.](#)
114. Lane, E.L. *et al.* (2022) Spontaneous Graft-Induced Dyskinesias Are Independent of 5-HT Neurons and Levodopa Priming in a Model of Parkinson's Disease. [Mov Disord. 37 \(3\): 613-9.](#)
115. Ekong, M.B. *et al.* (2024) EVALUATION OF PRENATAL CALABASH CHALK GEOPHAGY ON THE DEVELOPING BRAIN OF WISTAR RATS [IBRO Neuroscience Reports. 14 Mar \[Epub ahead of print\].](#)
116. Demartini, C. *et al.* (2022) Modulation of Glia Activation by TRPA1 Antagonism in Preclinical Models of Migraine. [Int J Mol Sci. 23 \(22\):14085](#)

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

Acknowledgements

This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchased product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in

research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com

Health And Safety Information Material Safety Datasheet documentation #10041 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA275PB>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:Pacific Blue® \(MCA1210PB\)](#)

North & South America	Tel: +1 800 265 7376 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
----------------------------------	---	------------------	---	---------------	---

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M404884:220907'

Printed on 01 May 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)