

Datasheet: MCA1815

BATCH NUMBER 153548

Description:	MOUSE ANTI HUMAN CD68
Specificity:	CD68
Other names:	MACROSIALIN
Format:	S/N
Product Type:	Monoclonal Antibody
Clone:	514H12
Isotype:	IgG2a
Quantity:	1 ml

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			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			1/40 - 1/80
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting		▪		
Immunofluorescence	▪			

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.

(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Tris/EDTA buffer pH 9.0 is recommended for this purpose. *N.B. The epitope recognised by clone 514H12 is sensitive to peroxide. It is therefore recommended that any peroxidase-blocking steps be performed after incubation with this antibody.*

Target Species	Human
Product Form	Tissue Culture Supernatant - liquid

Preservative Stabilisers	0.09% Sodium Azide
Immunogen	Fusion protein corresponding to external domain of human CD68.
External Database Links	<p>UniProt: P34810 Related reagents</p> <p>Entrez Gene: 968 CD68 Related reagents</p>
RRID	AB_322866
Fusion Partners	Spleen cells from immunized mice were fused with cells of the mouse p3-NS1-Ag4-1 myeloma cell line
Specificity	Mouse anti Human CD68 antibody, clone 514H12 recognizes the human CD68 cell surface antigen, a ~110 kDa glycoprotein primarily expressed by macrophages and monocytes.
Histology Positive Control Tissue	Human tonsil
References	<ol style="list-style-type: none"> Hameed, A. <i>et al.</i> (1994) Immunohistochemical expression of CD68 antigen in human peripheral blood T cells. Hum Pathol. 25 (9): 872-6. Madden, L.R. <i>et al.</i> (2010) Proangiogenic scaffolds as functional templates for cardiac tissue engineering. Proc Natl Acad Sci U S A. 107 (34): 15211-6. Muthana, M. <i>et al.</i> (2011) Use of macrophages to target therapeutic adenovirus to human prostate tumors. Cancer Res. 71 (5): 1805-15. da Costa, C.E. <i>et al.</i> (2005) Presence of osteoclast-like multinucleated giant cells in the bone and nonostotic lesions of Langerhans cell histiocytosis. J Exp Med. 201 (5): 687-93. Wang, X. <i>et al.</i> (2006) Monocyte/macrophage and T-cell infiltrates in peritoneum of patients with ovarian cancer or benign pelvic disease. J Transl Med. 4: 30. Coury, F. <i>et al.</i> (2008) Langerhans cell histiocytosis reveals a new IL-17A-dependent pathway of dendritic cell fusion. Nat Med. 14: 81-7. Rodriguez-Agudo, D. <i>et al.</i> (2006) Localization of StarD5 cholesterol binding protein. J Lipid Res. 47: 1168-75. Achard, V. <i>et al.</i> (2007) Renin receptor expression in human adipose tissue. Am J Physiol Regul Integr Comp Physiol. 292: R274-82. Paulmyer-Lacroix, O. <i>et al.</i> (2006) Expression of adrenomedullin in adipose tissue of lean and obese women. Eur J Endocrinol. 155: 177-85. Hever, A. <i>et al.</i> (2007) Human endometriosis is associated with plasma cells and overexpression of B lymphocyte stimulator. Proc Natl Acad Sci U S A. 104: 12451-6. Silaghi, A. <i>et al.</i> (2007) Expression of adrenomedullin in human epicardial adipose tissue: role of coronary status. Am J Physiol Endocrinol Metab. 293: E1443-50. Kaibara, N. <i>et al.</i> (2008) Comparative histopathological analysis between tenosynovitis and joint synovitis in rheumatoid arthritis. Histopathology. 52: 856-64. Moskovszky, L. <i>et al.</i> (2009) Genomic instability in giant cell tumor of bone. A study of

52 cases using DNA ploidy, relocalization FISH, and array-CGH analysis. [Genes Chromosomes Cancer. 48: 468-79.](#)

14. Angel, C.E. *et al.* (2007) CD14+ antigen-presenting cells in human dermis are less mature than their CD1a+ counterparts. [Int Immunol. 19: 1271-9.](#)

15. de Vos van Steenwijk PJ *et al.* (2013) Tumor-infiltrating CD14-positive myeloid cells and CD8-positive T-cells prolong survival in patients with cervical carcinoma. [Int J Cancer. 133 \(12\): 2884-94.](#)

16. Quispel, W.T. *et al.* (2016) Tertiary lymphoid structures are confined to patients presenting with unifocal Langerhans Cell Histiocytosis. [Oncoimmunology. 5 \(8\): e1164364.](#)

17. Toh, M.L. *et al.* (2014) Bone- and cartilage-protective effects of a monoclonal antibody against colony-stimulating factor 1 receptor in experimental arthritis. [Arthritis Rheumatol. 66 \(11\): 2989-3000.](#)

18. Schirmer, L. *et al.* (2014) Differential loss of KIR4.1 immunoreactivity in multiple sclerosis lesions. [Ann Neurol. 75 \(6\): 810-28.](#)

19. Schrevel, M. *et al.* (2017) Autocrine expression of the epidermal growth factor receptor ligand heparin-binding EGF-like growth factor in cervical cancer. [Int J Oncol. 50 \(6\): 1947-54.](#)

20. Zhang, W. *et al.* (2013) Myeloid clusters are associated with a pro-metastatic environment and poor prognosis in smoking-related early stage non-small cell lung cancer. [PLoS One. 8 \(5\): e65121.](#)

21. Bobosha, K. *et al.* (2014) T-cell regulation in lepromatous leprosy. [PLoS Negl Trop Dis. 8 \(4\): e2773.](#)

Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	Guaranteed until date of expiry. Please see product label.
Health And Safety Information	Material Safety Datasheet documentation #10053 available at: https://www.bio-rad-antibodies.com/SDS/MCA1815 10053
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@550 , DyLight@650 , DyLight@680 , DyLight@800 , FITC , HRP

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (STAR77...) [HRP](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

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

'M353472:190423'

Printed on 29 Feb 2024

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