

Datasheet: MCA1815

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. EDTA buffer pH 8.0 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	UniProt: P34810 Related reagents Entrez Gene:

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	1. Hameed, A. <i>et al.</i> (1994) Immunohistochemical expression of CD68 antigen in human peripheral blood T cells. Hum Pathol. 25 (9): 872-6. 2. 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. 3. Muthana, M. <i>et al.</i> (2011) Use of macrophages to target therapeutic adenovirus to human prostate tumors. Cancer Res. 71 (5): 1805-15. 4. 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. 5. 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. 6. 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. 7. Rodriguez-Agudo, D. <i>et al.</i> (2006) Localization of StarD5 cholesterol binding protein. J Lipid Res. 47: 1168-75. 8. Achard, V. <i>et al.</i> (2007) Renin receptor expression in human adipose tissue. Am J Physiol Regul Integr Comp Physiol. 292: R274-82. 9. 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. 10. 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. 11. 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. 12. Kaibara, N. <i>et al.</i> (2008) Comparative histopathological analysis between tenosynovitis and joint synovitis in rheumatoid arthritis. Histopathology. 52: 856-64. 13. 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. <i>et al.</i> (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 <i>et al.</i> (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. <i>et al.</i> (2016) Tertiary lymphoid structures are confined to patients presenting with unifocal Langerhans Cell Histiocytosis. Oncoimmunology. 5 (8): e1164364. 17. Toh, M.L. <i>et al.</i> (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. <i>et al.</i> (2014) Differential loss of KIR4.1 immunoreactivity in multiple sclerosis lesions. Ann Neurol. 75 (6): 810-28. 19. Schrevel, M. <i>et al.</i> (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.

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.
Shelf Life	Please see label for expiry date.
Health And Safety Information	Material Safety Datasheet documentation #10053 available at: 10053: https://www.bio-rad-antibodies.com/uploads/MSDS/10053.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Human Anti Mouse IgG2a (HCA037...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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
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