

Datasheet: MCA5709PE

Description:	MOUSE ANTI HUMAN CD68:RPE
Specificity:	CD68
Other names:	MACROSIALIN
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	KP1
Isotype:	IgG1
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 (1)	▪			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.

(1) Membrane permeabilization is required for this application. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.

Target Species	Human		
Species Cross Reactivity	Reacts with: Primate, Rat N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1ml distilled water. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)

Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin 5% Sucrose
Immunogen	Subcellular fraction of human alveolar macrophages
External Database Links	UniProt: P34810 Related reagents Entrez Gene: 968 CD68 Related reagents
RRID	AB_11152591
Specificity	Mouse anti human CD68 antibody, clone KP1 recognizes the human CD68 cell surface antigen, a ~110 kDa glycoprotein primarily expressed by macrophages and monocytes.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Masaki, T. <i>et al.</i> (2004) Activation of the extracellular-signal regulated protein kinase pathway in human glomerulopathies. J Am Soc Nephrol. 15 (7): 1835-43. Vroon, A. <i>et al.</i> (2007) Neuroinflammation in Parkinson's patients and MPTP-treated mice is not restricted to the nigrostriatal system: microgliosis and differential expression of interleukin-1 receptors in the olfactory bulb. Exp Gerontol. 42 (8): 762-71. Schwarz, F. <i>et al.</i> (2016) Human-specific derived alleles of CD33 and other genes protect against postreproductive cognitive decline. Proc Natl Acad Sci U S A. 113 (1): 74-9. Xiao, J. <i>et al.</i> (2016) Effects of ketanserin on experimental colitis in mice and macrophage function. Int J Mol Med. 37 (3): 659-68. Blanco, R.E. <i>et al.</i> (2019) Application of CNTF or FGF-2 increases the number of M2-like macrophages after optic nerve injury in adult <i>Rana pipiens</i>. PLoS One. 14 (5): e0209733. Hu, M. <i>et al.</i> (2022) Implications of <i>Sm22α</i>-Cre expression in keratinocytes and unanticipated inflammatory skin lesion in a model of atherosclerosis. Am J Physiol Heart Circ Physiol. 323 (3): H528-H534. Robinson, H. <i>et al.</i> (2022) The effect of expressive writing on wound healing: Immunohistochemistry analysis of skin tissue two weeks after punch biopsy wounding. J Psychosom Res. 161: 110987. Ruggiero, A.D. <i>et al.</i> (2023) Long-term dasatinib plus quercetin effects on aging outcomes and inflammation in nonhuman primates: implications for senolytic clinical trial

design. [Geroscience. 45 \(5\): 2785-803.](#)

Storage	This product is shipped at ambient temperature. Prior to reconstitution store at +4°C. After 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 micro-centrifugation 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/MCA5709PE 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

[LEUCOPERM \(BUF09\)](#)

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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