



## Datasheet: MCA874PE

**BATCH NUMBER 162434**

<b>Description:</b>	MOUSE ANTI HUMAN MACROPHAGES:RPE
<b>Specificity:</b>	MACROPHAGES/MONOCYTES/GRANULOCYTES
<b>Other names:</b>	CALPROTECTIN
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MAC387
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	▪			Neat - 1/5

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 permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

### Target Species

Human

### Species Cross Reactivity

Reacts with: Horse, Pig, Dog, Rabbit, Baboon, Bovine, Guinea Pig, Rat, Cat, Cynomolgus monkey, Rhesus Monkey, Goat, Fallow deer, Pygmy hippopotamus, Mink, Marmoset  
**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 1.0ml distilled water

### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
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<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
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<b>Buffer Solution</b>	Phosphate buffered saline
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<b>Preservative</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	1% Bovine Serum Albumin

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<b>Immunogen</b>	Human monocytes.
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<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P06702</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">6280</a> S100A9 <a href="#">Related reagents</a>
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<b>Synonyms</b>	CAGB, CFAG, MRP14
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<b>RRID</b>	AB_10851405
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<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
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<b>Specificity</b>	<p><b>Mouse anti Human macrophages, clone MAC387</b> recognizes the L1 or Calprotectin molecule, an intracytoplasmic antigen comprised of a 12 kDa alpha chain and a 14 kDa beta chain. Although originally described as binding to epitopes common to both the alpha and beta chains (<a href="#">Flavell <i>et al.</i> 1987</a>) subsequent evidence indicates that the antibody detects an epitope exclusively expressed on the beta chain (<a href="#">Goebeler <i>et al.</i> 1994</a>) demonstrated by immunofluorescent and western blotting on both naturally expressing and transfected targets. In addition, Mouse anti Human macrophages, clone MAC387 detects the beta chain in complex with the alpha.</p> <p>The antigen recognized by Mouse anti Human macrophages, clone MAC387 is expressed by granulocytes, monocytes and by tissue macrophages. Variable results have been reported for staining brain macrophages and microglia. The epitope recognized appears to be well conserved and the antibody is routinely used for the detection of myeloid cells in a wide range of species.</p>
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
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<b>References</b>	<ol style="list-style-type: none"><li>1. Ueland, T. <i>et al.</i> (2009) Dickkopf-1 enhances inflammatory interaction between platelets and endothelial cells and shows increased expression in atherosclerosis. <a href="#">Arterioscler Thromb Vasc Biol. 29: 1228-34</a></li><li>2. Brandtzaeg, P. <i>et al.</i> (1992) The leucocyte protein L1 (calprotectin): usefulness as an immunohistochemical marker antigen and putative biological function. <a href="#">Histopathology. 21: 191-6.</a></li></ol>
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<b>Further Reading</b>	<ol style="list-style-type: none"><li>1. Burk, J. <i>et al.</i> (2013) Equine cellular therapy--from stall to bench to bedside? <a href="#">Cytometry A. 83 (1): 103-13.</a></li><li>2. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. <a href="#">Vet Res. 39: 54.</a></li></ol>
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<b>Storage</b>	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.
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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA874PE">https://www.bio-rad-antibodies.com/SDS/MCA874PE</a>
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

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

### Recommended Useful Reagents

[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](mailto: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](mailto: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](mailto:antibody_sales_de@bio-rad.com)

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