

## Datasheet: MCA874APC

<b>Description:</b>	MOUSE ANTI HUMAN MACROPHAGES:APC
<b>Specificity:</b>	MACROPHAGES/MONOCYTES/GRANULOCYTES
<b>Other names:</b>	CALPROTECTIN
<b>Format:</b>	APC
<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 product 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 product 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.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	<p>Reacts with: Horse, Pig, Dog, Rabbit, Baboon, Bovine, Guinea Pig, Rat, Cat, Cynomolgus monkey, Rhesus Monkey, Goat, Fallow deer, Pygmy hippopotamus, Mink, Marmoset</p> <p><b>N.B.</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.</p>
<b>Product Form</b>	Purified IgG conjugated to Allophycocyanin (APC) - lyophilized.
<b>Reconstitution</b>	<p>Reconstitute with 1.0 ml distilled water</p> <p>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.</p>

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	APC	650	661
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant.		
<b>Buffer Solution</b>	Phosphate buffered saline.		
<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin 5% Sucrose		
<b>Immunogen</b>	Human monocytes.		
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P06702</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">6280</a>   S100A9   <a href="#">Related reagents</a></p>		
<b>Synonyms</b>	CAGB, CFAG, MRP14		
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.		
<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 et al. 1987</a>) subsequent evidence indicates that the antibody detects an epitope exclusively expressed on the beta chain (<a href="#">Goebeler et al. 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>		
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul		
<b>References</b>	1. Burudi, E.M. <i>et al.</i> (2002) Regulation of indoleamine 2,3-dioxygenase expression in simian immunodeficiency virus-infected monkey brains. <a href="#">J Virol. 76: 12233-41.</a> 2. 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>		

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<b>Further Reading</b>	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> 2. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. <a href="#">Vet Res. 39: 54.</a>
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<b>Storage</b>	This product is shipped at ambient temperature. 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/MCA874APC">https://www.bio-rad-antibodies.com/SDS/MCA874APC</a> 20487
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<b>Regulatory</b>	For research purposes only.
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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:APC \(MCA928APC\)](#)

### Recommended Useful Reagents

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

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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