

Datasheet: MCA874A488

Description:	MOUSE ANTI HUMAN MACROPHAGES:Alexa Fluor® 488
Specificity:	MACROPHAGES/MONOCYTES/GRANULOCYTES
Other names:	CALPROTECTIN
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	MAC387
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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 - 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 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: 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 Alexa Fluor® 488 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®488	495	519
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture		

supernatant

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide
Stabilisers 1% Bovine Serum Albumin

Approx. Protein Concentrations IgG concentration 0.05 mg/ml

Immunogen Human monocytes.

External Database Links

UniProt:
[P06702](#) [Related reagents](#)

Entrez Gene:
[6280](#) S100A9 [Related reagents](#)

Synonyms CAGB, CFAG, MRP14

RRID AB_808668

Fusion Partners Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.

Specificity **Mouse anti Human macrophages, clone MAC387** 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 ([Flavell et al. 1987](#)) subsequent evidence indicates that the antibody detects an epitope exclusively expressed on the beta chain ([Goebeler et al. 1994](#)) 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.

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.

Flow Cytometry Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

References

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Further Reading

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Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Guarantee

12 months from date of despatch

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Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA874A488>
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA928A488\)](#)

Recommended Useful Reagents

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

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

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'M438125:250326'

Printed on 14 May 2025

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