

Datasheet: MCA2874A488T

Description:	MOUSE ANTI RAT CD86:Alexa Fluor® 488
Specificity:	CD86
Other names:	B7-2
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	24F
Isotype:	IgG1
Quantity:	25 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	■			Neat - 1/10

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.

Target Species	Rat		
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 G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide (NaN ₃)		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.05mg/ml		
Immunogen	HTLV-1 transformed Lewis-S1 cells.		
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the P3U1 mouse myeloma cell line.		
Specificity	Mouse anti Rat CD86 antibody, clone 24F recognizes rat CD86, otherwise known as B7-2, a type		

I transmembrane protein and member of the Ig superfamily, which acts as a ligand for both CD28 and CD152 (CTLA-4), and is primarily expressed on antigen presenting cells (APCs) including dendritic cells, and also on germinal centre B cells and macrophages.

Like CD80, CD86 is an accessory molecule which functions in the CD28-CD80/CD86 co-stimulatory pathway, vital for T cell activation, crosstalk between T and B cells, and Th₂-mediated Ig production.

Mouse anti Rat CD86 antibody, clone 24F has been shown to block the co-stimulatory activity of rat CD86 ([Maeda *et al.* 1997](#)).

Flow Cytometry

Use 10ul of the suggested working dilution to label 1x10⁶ cells in 100ul.

References

1. Maeda, K. *et al.* (1997) Characterization of rat CD80 and CD86 by molecular cloning and mAb. [Int Immunol. 9 \(7\): 993-1000.](#)
2. Damoiseaux, J.G. *et al.* (1998) Costimulatory molecules CD80 and CD86 in the rat; tissue distribution and expression by antigen-presenting cells. [J Leukoc Biol. 64 \(6\): 803-9.](#)
3. Hanabuchi, S. *et al.* (2000) Development of human T-cell leukemia virus type 1-transformed tumors in rats following suppression of T-cell immunity by CD80 and CD86 blockade. [J Virol. 74: 428-35.](#)
4. Kano, M. *et al.* (1998) A crucial role of host CD80 and CD86 in rat cardiac xenograft rejection in mice. [Transplantation. 65: 837-43.](#)
5. Tamatani, T. *et al.* (2000) AILIM/ICOS: a novel lymphocyte adhesion molecule. [Int Immunol. 12: 51-5.](#)
6. Dilek, N. *et al.* (2012) Control of transplant tolerance and intragraft regulatory T cell localization by myeloid-derived suppressor cells and CCL5. [J Immunol. 188: 4209-16.](#)
7. Ghiringhelli, F. *et al.* (2005) Tumor cells convert immature myeloid dendritic cells into TGF-beta-secreting cells inducing CD4+CD25+ regulatory T cell proliferation. [J Exp Med. 202: 919-29.](#)
8. Sacedón, R. *et al.* (1999) Glucocorticoid-mediated regulation of thymic dendritic cell function. [Int Immunol. 11: 1217-24.](#)
9. Kawai, T. *et al.* (2000) T(h)1 transmigration anergy: a new concept of endothelial cell-T cell regulatory interaction. [Int Immunol. 12: 937-48.](#)
10. Macphée, I.A. *et al.* (2002) The Th2-response in mercuric chloride-induced autoimmunity requires continuing costimulation via CD28. [Clin Exp Immunol. 129: 405-10.](#)
11. MacPhee, I.A. *et al.* (2006) Blockade of OX40-ligand after initial triggering of the T helper 2 response inhibits mercuric chloride-induced autoimmunity. [Immunology. 117: 402-8.](#)
12. Yrlid, U. *et al.* (2006) A distinct subset of intestinal dendritic cells responds selectively to oral TLR7/8 stimulation. [Eur J Immunol. 36: 2639-48.](#)
13. Matsumoto, S. *et al.* (2015) CD200+ and CD200- macrophages accumulated in ischemic lesions of rat brain: the two populations cannot be classified as either M1 or M2 macrophages. [J Neuroimmunol. 282: 7-20.](#)
14. Patil, P.S. *et al.* (2016) Fluorinated methacrylamide chitosan hydrogels enhance collagen synthesis in wound healing through increased oxygen availability. [Acta Biomater. Mar 18. pii: S1742-7061\(16\)30116-7. \[Epub ahead of print\]](#)

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. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Acknowledgements This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com

Health And Safety Information Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA1209A488\)](#)

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
----------------------------------	---	------------------	---	---------------	---

'M300076:170105'

Printed on 01 Aug 2018

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)