Datasheet: MCA2874T

BATCH NUMBER 159382

Description:	MOUSE ANTI RAT CD86
Specificity:	CD86
Other names:	B7-2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	24F
Isotype:	IgG1
Quantity:	25 µg

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	▪			
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN_3)

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	HTLV-1 transformed Lewis-S1 cells.
RRID	AB_2260076
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 Th_2-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 $1x10^6$ cells in 100ul.
References	1. 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. 2. Kano, M. *et al.* (1998) A crucial role of host CD80 and CD86 in rat cardiac xenograft rejection in mice. Transplantation. 65: 837-43. 3. Sacedón, R. *et al.* (1999) Glucocorticoid-mediated regulation of thymic dendritic cell function. Int Immunol. 11: 1217-24. 4. 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. 5. Tamatani, T. *et al.* (2000) AILIM/ICOS: a novel lymphocyte adhesion molecule. Int Immunol. 12: 51-5. 6. 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. 7. Macphee, I.A. *et al.* (2002) The Th2-response in mercuric chloride-induced autoimmunity requires continuing costimulation via CD28. Clin Exp Immunol. 129: 405-10. 8. 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. 9. 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.
10. 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.
11. 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.
12. 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.
13. Patil, P.S. *et al.* (2016) Fluorinated methacrylamide chitosan hydrogels enhance collagen synthesis in wound healing through increased oxygen availability. Acta Biomater. 36: 164-74.
14. Hellenbrand, D.J. *et al.* (2019) Sustained interleukin-10 delivery reduces inflammation and improves motor function after spinal cord injury. J Neuroinflammation. 16 (1): 93.
15. Zhou, X. *et al.* (2022) Dusp6 deficiency attenuates neutrophil-mediated cardiac damage in the acute inflammatory phase of myocardial infarction. Nat Commun. 13 (1): 6672.

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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2874T 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

Recommended Negative Controls

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

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

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