

Datasheet: MCA1118PET

Description:	MOUSE ANTI HUMAN CD86:RPE
Specificity:	CD86
Other names:	B7-2
Format:	RPE
Product Type:	Monoclonal Antibody
Product Type: Clone:	Monoclonal Antibody BU63
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Product Details

RRID AB_1102406

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 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.

Target Species	Human					
Product Form	Purified IgG conjugate	Purified IgG conjugated to R. Phycoerythrin (RPE) - Iyophilized				
Reconstitution	Reconstitute in 0.25 n	Reconstitute in 0.25 ml disilled water				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)			
	RPE 488nm laser	496	578			
Preparation	Purified IgG prepared	by affinity chromatog	raphy on Protein A fron	n tissue culture supernatant		
Buffer Solution	Phosphate buffered sa	aline				
Preservative	0.09% Sodium Azide					
Stabilisers	1% Bovine Serum	Albumin				
	5% Sucrose					
Immunogen	Human peripheral blo	od lymphocytes.				

UniProt:

External Database

Links

P42081 Related reagents

Entrez Gene:

942 CD86 Related reagents

Synonyms

CD28LG2

Fusion Partners

Spleen cells from immunised mice were fused with cells of the mouse P3.X63 Ag8653 myeloma cell line.

Specificity

Mouse anti Human CD86 antibody, clone Bu63 recognizes human CD86 also known as B7-2, a type I transmembrane protein expressed by monocytes and activated B cells (<u>Engel et al. 1994</u>). CD86 acts as a co-stimulaory molecule along with CD80 (<u>Lanier et al. 1995</u>) and is a ligand for CD28 and CTLA-4 (Azuma et al. 1993).

CD86 is a member of the Immunoglobulin superfamily and carries an extracellular domain bearing both an Ig-v-like domain which contains the CTLA-4 binding site and an adjacent C2-like domain. CD86 plays an important role in co-stimulation of T cell proliferation (Freeman et al. 1993), IL-2 production (Ribot et al. 2012) and in the primary immune response (Schultze et al. 1996).

Domain depletion epitope mapping studies indicate that the binding site of Mouse anti Human CD86, <u>clone Bu63</u> is located within the Ig-v-like domain of human CD86 (<u>Jeanin *et al.* 1997</u>).

CD86 along with CD80 may be exploited as receptors for adenovirus entry into cells (Short et al. 2004 2006).

Flow Cytometry

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

References

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- 2. Nozawa, Y. *et al.* (1993) A novel monoclonal antibody (FUN-1) identifies an activation antigen in cells of the B-cell lineage and Reed-Sternberg cells. <u>J Pathol. 169 (3): 309-15.</u>
- 3. Goodyear, O. *et al.* (2010) Induction of a CD8+ T-cell response to the MAGE cancer testis antigen by combined treatment with azacitidine and sodium valproate in patients with acute myeloid leukemia and myelodysplasia. Blood. 116: 1908-18.
- 4. Angel, C.E. *et al.* (2006) Cutting edge: CD1a+ antigen-presenting cells in human dermis respond rapidly to CCR7 ligands. J Immunol. 176 (10): 5730-4.
- 5. Salte, T. *et al.* (2010) Increased intracellular growth of *Mycobacterium avium* in HIV-1 exposed monocyte-derived dendritic cells. <u>Microbes Infect. 13: 276-83.</u>
- 6. Adler, H.S. *et al.* (2010) Neuronal nitric oxide synthase modulates maturation of human dendritic cells. <u>J Immunol</u>. 184: 6025-34.
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- 8. Kapsogeorgou, E.K. *et al.* (2001) Functional expression of a costimulatory B7.2 (CD86) protein on human salivary gland epithelial cells that interacts with the CD28 receptor, but has reduced binding to CTLA4. <u>J Immunol. 166: 3107-13.</u>
- 9. Lozanoska-Ochser, B. *et al.* (2008) Expression of CD86 on human islet endothelial cells facilitates T cell adhesion and migration. <u>J Immunol. 181: 6109-16.</u>
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- 11. Zhan, H. et al. (2003) The immunomodulatory role of human conjunctival epithelial cells. Invest

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- 12. Sprater, F. et al. (2012) Expression of ESE-3 isoforms in immunogenic and tolerogenic human monocyte-derived dendritic cells. PLoS One. 7 (11): e49577.
- 13. McCarthy, N.E. et al. (2013) Proinflammatory V₀₂₊ T Cells Populate the Human Intestinal Mucosa and Enhance IFN-γ Production by Colonic αβ T Cells. J Immunol. 191: 2752-63.
- 14. Hofmann-Wellenhof, R. et al. (2004) Sunburn cell formation, dendritic cell migration, and immunomodulatory factor production after solar-simulated irradiation of sunscreen-treated human skin explants in vitro. J Invest Dermatol. 123: 781-7.
- 15. Rajkovic, I. et al. (2011) Differences in T-helper polarizing capability between human monocytederived dendritic cells and monocyte-derived Langerhans'-like cells. Immunology. 132: 217-25.

Storage

Prior to reconstitution store at +4°C. Following reconstitution 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.

Guarantee	12 months from date of reconstitution.
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

Worldwide

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

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

'M342877:190110'

Printed on 18 Apr 2019

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