

Datasheet: MCA1118A647

BATCH NUMBER 1611

Description:	MOUSE ANTI HUMAN CD86:Alexa Fluor® 647
Specificity:	CD86
Other names:	B7-2
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	BU63
Isotype:	lgG1
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	•			Neat

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	Human				
Product Form	Purified IgG conjugated to Alexa Fluor 647 - liquid				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm		
	Alexa Fluor®647	650	665		
Preparation Buffer Solution	Purified IgG prepared supernatant Phosphate buffered s	-	raphy on Protein A		
	T Hoophate bulleted 5	umo			
Preservative Stabilians	0.09% Sodium Azide	` 0,			
Stabilisers	1% Bovine Serum Alk	oumin			
Approx. Protein	IgG concentration 0.0	5 mg/ml			

Concentrations							
Immunogen	Human peripheral blood lymphocytes.						
External Database Links	UniProt: 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 (Engel et al. 1994). CD86 acts as a co-stimulaory molecule along with CD80 (Lanier et al. 1995) 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 <u>Ig-v-like</u> 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 (<u>Freeman et al. 1993</u>), IL-2 production (<u>Ribot et al. 2012</u>) and in the primary immune response (<u>Schultze et al. 1996</u>).						
	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).						
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul						
References	 McLellan, A.D. <i>et al.</i> (1999) Induction of dendritic cell costimulator molecule expression is suppressed by T cells in the absence of antigen-specific signalling: role of cluster formation, CD40 and HLA-class II for dendritic cell activation. <u>Immunology. 98 (2): 171-80.</u> Nozawa, Y. <i>et al.</i> (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> Goodyear, O. <i>et al.</i> (2010) Induction of a CD8+ T-cell response to the MAGE cancer 						

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- 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>

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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 $V\delta 2+T$ Cells Populate the Human Intestinal Mucosa and Enhance IFN- γ Production by Colonic $\alpha\beta$ T Cells. <u>J Immunol. 191:</u> 2752-63.
- 14. Hofmann-Wellenhof, R. *et al.* (2004) Sunburn cell formation, dendritic cell migration, and immunomodulatory factor production after solar-simulated irradiation of sunscreentreated human skin explants *in vitro*. <u>J Invest Dermatol</u>. 123: 781-7.
- 15. Rajkovic, I. *et al.* (2011) Differences in T-helper polarizing capability between human monocyte-derived dendritic cells and monocyte-derived Langerhans'-like cells. limmunology.132: 217-25.
- 16. Silk, K.M. *et al.* (2012) Rapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. <u>J Biomed Biotechnol</u>. 2012: 172420.

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.

Guarantee

12 months from date of despatch

Acknowledgements

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Health And Safety

Material Safety Datasheet documentation #10041 available at:

Information https://www.bio-rad-antibodies.com/SDS/MCA1118A647

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Regulatory For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 647 (MCA928A647)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South Tel: +1 800 265 7376 America

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21

Fax: +1 919 878 3751

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M364805:200529'

Printed on 29 Apr 2024

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