

Datasheet: MCA1118F BATCH NUMBER 0315

Description:	MOUSE ANTI HUMAN CD86:FITC		
Specificity:	CD86		
Other names:	B7-2		
Format:	FITC		
Product Type:	Monoclonal Antibody		
Floudet Type.	Monoolonal / Mibody		
Clone:	BU63		

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 <u>www.bio-rad-antibodies.com/protocols</u> .					
	· · · ·	Yes No	Not Determined	Suggested Dilution		
	Flow Cytometry	•		Neat		
	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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid					
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)			
	FITC	490	525			
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 1% Bovine Serum A	lbumin				
Approx. Protein	IgG concentration 0.1 n	ng/ml				

Concentrations

Immunogen	Human peripheral blood lymphocytes.
External Database Links	UniProt: P42081 Related reagents Entrez Gene: 942 CD86 Related reagents
Synonyms	CD28LG2
RRID	AB_321776
Fusion Partners	Spleen cells from immunised mice were fused with cells of the mouse P3.X63 Ag8653 myeloma cell line.
SpecificityMouse anti Human CD86 antibody, clone Bu63 recognizes human CD86 a B7-2, a type I transmembrane protein expressed by monocytes and activated (Engel et al. 1994). CD86 acts as a co-stimulaory molecule along with CD80 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 <i>et al.</i> 1993</u>), IL-2 production (<u>Ribot <i>et al.</i> 2012</u>) and in the primary immune response (<u>Schultze <i>et al.</i> 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 <i>et</i></u> <u>al. 1997</u>).
	CD86 along with CD80 may be exploited as receptors for adenovirus entry into cells (<u>Short <i>et al.</i> 2004</u> 2006).
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 testis antigen by combined treatment with azacitidine and sodium valproate in patients with acute myeloid leukemia and myelodysplasia. <u>Blood. 116: 1908-18.</u> Angel, C.E. <i>et al.</i> (2006) Cutting edge: CD1a+ antigen-presenting cells in human dermis respond rapidly to CCR7 ligands. <u>J Immunol. 176 (10): 5730-4.</u>

	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. <i>et al.</i> (2010) Neuronal nitric oxide synthase modulates maturation of human
	dendritic cells. <u>J Immunol. 184: 6025-34.</u>
	7. Hovden, A.O. <i>et al.</i> (2011) Maturation of monocyte derived dendritic cells with OK432
	boosts IL-12p70 secretion and conveys strong T-cell responses. <u>BMC Immunol. 12:2.</u> 8. Kapsogeorgou, E.K. <i>et al.</i> (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. J Immunol. 166: 3107-13.
	9. Lozanoska-Ochser, B. <i>et al.</i> (2008) Expression of CD86 on human islet endothelial cells
	facilitates T cell adhesion and migration. <u>J Immunol. 181: 6109-16.</u> 10. Urban, B.C. <i>et al.</i> (2001) A role for CD36 in the regulation of dendritic cell function. <u>Proc Natl Acad Sci U S A. 98: 8750-5.</u>
	11. Zhan, H. <i>et al.</i> (2003) The immunomodulatory role of human conjunctival epithelial cells. Invest Ophthalmol Vis Sci. 44: 3906-10.
	12. Sprater, F. <i>et al.</i> (2012) Expression of ESE-3 isoforms in immunogenic and tolerogenic human monocyte-derived dendritic cells. <u>PLoS One. 7 (11): e49577.</u>
	13. McCarthy, N.E. <i>et al.</i> (2013) Proinflammatory Vδ2+ T Cells Populate the Human Intestinal Mucosa and Enhance IFN-γ Production by Colonic αβ T Cells. <u>J Immunol. 191:</u>
	<u>2752-63.</u>
	14. Hofmann-Wellenhof, R. <i>et al.</i> (2004) Sunburn cell formation, dendritic cell migration,
	and immunomodulatory factor production after solar-simulated irradiation of sunscreen-
	treated human skin explants <i>in vitro</i> . <u>J Invest Dermatol</u> . <u>123: 781-7</u> .
	15. Rajkovic, I. <i>et al.</i> (2011) Differences in T-helper polarizing capability between human monocyte-derived dendritic cells and monocyte-derived Langerhans'-like cells.
	Immunology. 132: 217-25.
	16. Silk, K.M. <i>et al.</i> (2012) Rapamycin conditioning of dendritic cells differentiated from
	human ES cells promotes a tolerogenic phenotype. <u>J Biomed Biotechnol. 2012: 172420.</u>
Storage	Store at +4°C or at -20°C if preferred.
	This product should be stored undiluted.
	Storage in frost-free freezers is not recommended. 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
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1118F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South	Tel: +1 800 265 7376 Worldwid	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751	Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com	Email: antibody_sales_uk@bio-r	ad.com	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 'M364806:200529'

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