

Datasheet: MCA1118A700

### **BATCH NUMBER 1806**

Description:	MOUSE ANTI HUMAN CD86:Alexa Fluor® 700
Specificity:	CD86
Other names:	B7-2
Format:	ALEXA FLUOR® 700
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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	Human		
Product Form	Purified IgG conjug	ated to Alexa Fluor 700	- liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®700	702	723
Preparation	Purified IgG prepar supernatant	ed by affinity chromatogi	raphy on Protein A f
Buffer Solution	Phosphate buffered	d saline	
Preservative	0.09% Sodium Azio	de (NaN <sub>3</sub> )	
Stabilisers	1% Bovine Serum	Albumin	

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 <a href="Ig-v-like">Ig-v-like</a> 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 ( <a href="Freeman et al. 1993">Freeman et al. 1993</a> ), IL-2 production ( <a href="Ribot et al. 2012">Ribot et al. 2012</a> ) and in the primary immune response (				

- 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. <u>Blood. 116: 1908-18.</u>
- 4. Angel, C.E. *et al.* (2006) Cutting edge: CD1a+ antigen-presenting cells in human dermis respond rapidly to CCR7 ligands. <u>J Immunol</u>. <u>176 (10)</u>: <u>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. *et al.* (2010) Neuronal nitric oxide synthase modulates maturation of human dendritic cells. J Immunol. 184: 6025-34.
- 7. Hovden, A.O. *et al.* (2011) Maturation of monocyte derived dendritic cells with OK432 boosts IL-12p70 secretion and conveys strong T-cell responses. <u>BMC Immunol</u>. 12:2.
- 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</u>. 181: 6109-16.
- 10. Urban, B.C. *et al.* (2001) A role for CD36 in the regulation of dendritic cell function. Proc Natl Acad Sci U S A. 98: 8750-5.
- 11. Zhan, H. *et al.* (2003) The immunomodulatory role of human conjunctival epithelial cells. Invest Ophthalmol Vis Sci. 44: 3906-10.
- 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- $\gamma$  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*. J Invest Dermatol. 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. <a href="mailto:limmunology.132">limmunology.132</a>: 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

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 purchased 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**

Material Safety Datasheet documentation #10041 available at:

Information <a href="https://www.bio-rad-antibodies.com/SDS/MCA1118A700">https://www.bio-rad-antibodies.com/SDS/MCA1118A700</a>

10041

**Regulatory** For research purposes only

## **Related Products**

## **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 700 (MCA928A700)

## **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

Fax: +1 919 878 3751

North & South Tel: +1 800 265 7376

America

Worldwide

Tel: +44 (0)1865 852 700

**Europe** Tel: +49 (0) 89 8090 95 21

Fax: +44 (0)1865 852 739

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 'M344311:190111'

### Printed on 29 Apr 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint