Datasheet: MCA1118F

Description:	MOUSE ANTI HUMAN CD86:FITC
Specificity:	CD86
Other names:	B7-2
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	BU63
Isotype:	IgG1
Quantity:	0.1 mg

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 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 (NaN_3)
1% bovine serum albumin

Approx. Protein Concentrations

IgG concentration 0.1 mg/ml

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.
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 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 indicates that the binding site of Mouse anti Human CD86,clone Bu63 is located within the Ig-v-like domain of human CD86 (Jeanin *et al.* 1997). CD86 along with CD80 may be exploited as receptors for adenovirus entry into cells (Short *et al.* 2004 2006).
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl
References	1. McLellan, A.D. *et al.* (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. Immunology. 98 (2): 171-80. 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. J Pathol. 169 (3): 309-15. 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. Microbes Infect. 13: 276-83.

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16. Silk, K.M. *et al.* (2012) Rapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. J Biomed Biotechnol. 2012: 172420.
17. Ikezumi, Y. *et al.* (2021) Steroid treatment promotes an M2 anti-inflammatory macrophage phenotype in childhood lupus nephritis. Pediatr Nephrol. 36 (2): 349-59.

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. This product is photosensitive and should be protected from light.
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 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
'M408170:221010'

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