

Datasheet: MCA1118F

BATCH NUMBER 167676

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	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin		
Approx. Protein	IgG concentration 0.1 mg/ml		

Concentrations

Immunogen	Human peripheral blood lymphocytes.
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External Database Links

UniProt:

[P42081](#)

[Related reagents](#)

Entrez Gene:

[942](#)

CD86

[Related reagents](#)

Synonyms	CD28LG2
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RRID	AB_321776
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Fusion Partners	Spleen cells from immunised mice were fused with cells of the mouse P3.X63 Ag8653 myeloma cell line.
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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-stimulatory 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
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References

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2. 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.](#)
3. 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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6. 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. [J Immunol. 166: 3107-13.](#)
 7. Lozanoska-Ochser, B. *et al.* (2008) Expression of CD86 on human islet endothelial cells facilitates T cell adhesion and migration. [J Immunol. 181: 6109-16.](#)
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 13. Rajkovic, I. *et al.* (2011) Differences in T-helper polarizing capability between human monocyte-derived dendritic cells and monocyte-derived Langerhans'-like cells. [Immunology. 132: 217-25.](#)
 14. 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.](#)
 15. 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	<p>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.</p> <p>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.</p>
Guarantee	12 months from date of despatch
Health And Safety Information	<p>Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1118F</p> <p>10041</p>
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)
[HUMAN SEROBLOCK \(BUF070B\)](#)

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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
'M408170:221010'

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