

## Datasheet: MCA1118FT

<b>Description:</b>	MOUSE ANTI HUMAN CD86:FITC
<b>Specificity:</b>	CD86
<b>Other names:</b>	B7-2
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	BU63
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	25 µg

### 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](http://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.

<b>Target Species</b>	Human		
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% sodium azide (NaN <sub>3</sub> )		
<b>Stabilisers</b>	1% bovine serum albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml		

<b>Immunogen</b>	Human peripheral blood lymphocytes.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P42081</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">942</a>    CD86    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CD28LG2
<b>RRID</b>	AB_2244440
<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the mouse P3.X63 Ag8653 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD86 antibody, clone Bu63</b> recognizes human CD86 also known as B7-2, a type I transmembrane protein expressed by monocytes and activated B cells (<a href="#">Engel et al. 1994</a>). CD86 acts as a co-stimulatory molecule along with CD80 (<a href="#">Lanier et al. 1995</a>) and is a ligand for CD28 and CTLA-4 (<a href="#">Azuma et al. 1993</a>).</p> <p>CD86 is a member of the Immunoglobulin superfamily and carries an extracellular domain bearing both an <a href="#">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</a>), IL-2 production (<a href="#">Ribot et al. 2012</a>) and in the primary immune response (<a href="#">Schultze et al. 1996</a>).</p> <p>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 (<a href="#">Jeanin et al. 1997</a>).</p> <p>CD86 along with CD80 may be exploited as receptors for adenovirus entry into cells (<a href="#">Short et al. 2004 2006</a>).</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl.
<b>References</b>	<ol style="list-style-type: none"> <li>1. 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. <a href="#">Immunology. 98 (2): 171-80.</a></li> <li>2. 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. <a href="#">J Pathol. 169 (3): 309-15.</a></li> <li>3. 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. <a href="#">Blood. 116: 1908-18.</a></li> <li>4. Angel, C.E. <i>et al.</i> (2006) Cutting edge: CD1a+ antigen-presenting cells in human dermis respond rapidly to CCR7 ligands. <a href="#">J Immunol. 176 (10): 5730-4.</a></li> <li>5. Salte, T. <i>et al.</i> (2010) Increased intracellular growth of <i>Mycobacterium avium</i> in HIV-1 exposed monocyte-derived dendritic cells. <a href="#">Microbes Infect. 13: 276-83.</a></li> </ol>

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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.](#)
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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1118FT>  
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**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

**America** 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](https://bio-rad-antibodies.com/datasheets)

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