

## Datasheet: MCA1118SBB700

<b>Description:</b>	MOUSE ANTI HUMAN CD86:StarBright Blue 700
<b>Specificity:</b>	CD86
<b>Other names:</b>	B7-2
<b>Format:</b>	StarBright Blue 700
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	BU63
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS/0.5ml

### 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.

#### Target Species

Human

#### Product Form

Purified IgG conjugated to StarBright Blue 700 - liquid

#### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
StarBright Blue 700	473	703

#### 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<sub>3</sub>)  
 1% Bovine Serum Albumin  
 0.1% Pluronic F68  
 0.1% PEG 3350  
 0.05% Tween 20

<b>Approx. Protein Concentrations</b>	For information on the concentration of our StarBright Dye conjugated reagents please visit our <a href="#">FAQ</a> page.
<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>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</a> <a href="#">2006</a>).</p>
<b>Flow Cytometry</b>	Use 5µl of the suggested working dilution to label 0.5x10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application.
<b>References</b>	<ol style="list-style-type: none"> <li>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>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>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> <li>Adler, H.S. <i>et al.</i> (2010) Neuronal nitric oxide synthase modulates maturation of human dendritic cells. <a href="#">J Immunol. 184: 6025-34.</a></li> <li>Hovden, A.O. <i>et al.</i> (2011) Maturation of monocyte derived dendritic cells with OK432</li> </ol>

- boosts IL-12p70 secretion and conveys strong T-cell responses. [BMC Immunol. 12:2.](#)
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  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.](#)

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**Storage**

This product is shipped at ambient temperature.  
Store at +4°C. DO NOT FREEZE.  
This product should be stored undiluted.

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**Guarantee**

12 months from date of despatch

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**Acknowledgements**

This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts

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**Health And Safety Information**

Material Safety Datasheet documentation #20471 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA1118SBB700>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Useful Reagents

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

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

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

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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