Datasheet: MCA1118SBV570

Description:	MOUSE ANTI HUMAN CD86:StarBright Violet 570
Specificity:	CD86
Other names:	B7-2
Format:	StarBright Violet 570
Product Type:	Monoclonal Antibody
Clone:	BU63
Isotype:	IgG1
Quantity:	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.

	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 Violet 570 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
StarBright Violet 570	404	571

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
0.1% Pluronic F68
0.1% PEG 3350
0.05% Tween 20

Approx. Protein Concentrations	For information on the concentration of our StarBright Dye conjugated reagents please visit our FAQ page.
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 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 5µl of the suggested working dilution to label 0.5x10^6 cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application.
References	1. 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. 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. 4. Adler, H.S. *et al.* (2010) Neuronal nitric oxide synthase modulates maturation of human dendritic cells. J Immunol. 184: 6025-34. 5. Hovden, A.O. *et al.* (2011) Maturation of monocyte derived dendritic cells with OK432

boosts IL-12p70 secretion and conveys strong T-cell responses. BMC Immunol. 12:2.
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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	This product is shipped at ambient temperature. Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA1118SBV570
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

Product inquiries: 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

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