

Datasheet: MCA1118A488

BATCH NUMBER 1806

Description:	MOUSE ANTI HUMAN CD86:Alexa Fluor® 488
Specificity:	CD86
Other names:	B7-2
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	BU63
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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 - 1/10

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 Alexa Fluor 488 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®488	495	519
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 0.05 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

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-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 studies indicate 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 10ul of the suggested working dilution to label 10⁶ cells in 100ul

References

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13. McCarthy, N.E. *et al.* (2013) Proinflammatory Vδ2+ T Cells Populate the Human Intestinal Mucosa and Enhance IFN-γ Production by Colonic αβ T Cells. [J Immunol. 191: 2752-63.](#)
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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.](#)

Storage

Store at +4°C or at -20°C if preferred.
 Storage in frost-free freezers is not recommended.
 This product should be stored undiluted. This product is photosensitive and should be protected from light.
 Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use

Guarantee

12 months from date of despatch

Acknowledgements

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Health And Safety

Material Safety Datasheet documentation #10041 available at:

Information <https://www.bio-rad-antibodies.com/SDS/MCA1118A488>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA928A488\)](#)

Recommended Useful Reagents

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

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

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