

Datasheet: MCA1118

BATCH NUMBER 1711

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| Description: | MOUSE ANTI HUMAN CD86 |
| Specificity: | CD86 |
| Other names: | B7-2 |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | BU63 |
| Isotype: | IgG1 |
| Quantity: | 0.2 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 | ▪ | | | 1/20 - 1/100 |
| Immunohistology - Frozen | ▪ | | | 1/20 - 1/100 |
| Immunohistology - Paraffin | | | ▪ | |
| ELISA | | | ▪ | |
| Immunoprecipitation | ▪ | | | |
| Western Blotting | | | ▪ | |

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.

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| Target Species | Human |
| Product Form | Purified IgG - liquid |
| 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) |

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| Carrier Free | Yes |
| Approx. Protein Concentrations | IgG concentration 1.0 mg/ml |
| Immunogen | Human peripheral blood lymphocytes. |
| External Database Links | <p>UniProt: P42081 Related reagents</p> <p>Entrez Gene: 942 CD86 Related reagents</p> |
| Synonyms | CD28LG2 |
| RRID | AB_321774 |
| Fusion Partners | Spleen cells from immunised mice were fused with cells of the mouse P3.X63 Ag8653 myeloma cell line. |
| Specificity | <p>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).</p> <p>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).</p> <p>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).</p> <p>CD86 along with CD80 may be exploited as receptors for adenovirus entry into cells (Short et al. 2004 2006).</p> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul. |
| Histology Positive Control Tissue | Human Tonsil |
| References | <ol style="list-style-type: none"> 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. Immunology. 98 (2): 171-80. 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. J Pathol. 169 (3): 309-15. |

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5. Salte, T. *et al.* (2010) Increased intracellular growth of *Mycobacterium avium* in HIV-1 exposed monocyte-derived dendritic cells. [Microbes Infect. 13: 276-83.](#)
6. Adler, H.S. *et al.* (2010) Neuronal nitric oxide synthase modulates maturation of human dendritic cells. [J Immunol. 184: 6025-34.](#)
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12. Sprater, F. *et al.* (2012) Expression of ESE-3 isoforms in immunogenic and tolerogenic human monocyte-derived dendritic cells. [PLoS One. 7 \(11\): e49577.](#)
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.](#)
14. Hofmann-Wellenhof, R. *et al.* (2004) Sunburn cell formation, dendritic cell migration, and immunomodulatory factor production after solar-simulated irradiation of sunscreen-treated human skin explants *in vitro*. [J Invest Dermatol. 123: 781-7.](#)
15. 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.](#)
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 | <p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p> |
| Guarantee | 12 months from date of despatch |
| Health And Safety Information | Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf |
| Regulatory | For research purposes only |

Related Products

Recommended Secondary Antibodies

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| Goat Anti Mouse IgG (STAR77...) | HRP |
| Rabbit Anti Mouse IgG (STAR12...) | RPE |
| Goat Anti Mouse IgG (STAR70...) | FITC |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | Alk. Phos. , HRP |
| Goat Anti Mouse IgG (STAR76...) | RPE |
| Goat Anti Mouse IgG (H/L) (STAR117...) | Alk. Phos. , DyLight@488 , DyLight@550 , DyLight@650 , DyLight@680 , DyLight@800 , FITC , HRP |
| Rabbit Anti Mouse IgG (STAR13...) | HRP |
| Goat Anti Mouse IgG (Fc) (STAR120...) | FITC , HRP |
| Rabbit Anti Mouse IgG (STAR9...) | FITC |

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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| North & South America | Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com | Worldwide | Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com | Europe | Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com |
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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
'M364804:200529'

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