Datasheet: MCA1118A647

Description: MOUSE ANTI HUMAN CD86: Alexa Fluor® 647

Specificity: CD86

Other names: B7-2

Format: ALEXA FLUOR® 647

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.

<table>
<thead>
<tr>
<th>Applications</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>Yes</td>
<td>No</td>
<td>Not Determined</td>
<td>Neat</td>
</tr>
</tbody>
</table>

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 647 - liquid

Max Ex/Em

<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Excitation Max (nm)</th>
<th>Emission Max (nm)</th>
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</thead>
<tbody>
<tr>
<td>Alexa Fluor®647</td>
<td>650</td>
<td>665</td>
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</tbody>
</table>

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 (NaN₃)
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.05 mg/ml
**Immunogen**
Human peripheral blood lymphocytes.

**External Database Links**

<table>
<thead>
<tr>
<th>UniProt:</th>
<th>Related reagents</th>
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</thead>
<tbody>
<tr>
<td>P42081</td>
<td></td>
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</tbody>
</table>

**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 10^6 cells in 100ul

**References**


**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 Information**

Related Products

**Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 647 (MCA928A647)

**Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)