

Datasheet: MCA4636A488

Description:	HAMSTER ANTI MOUSE CD152:Alexa Fluor® 488
Specificity:	CD152
Other names:	CTLA-4
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	1B8
Isotype:	IgG
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

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	Mouse						
Product Form	Purified IgG conjugated to Alexa Fluor 488 - liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>Alexa Fluor®488</td> <td>495</td> <td>519</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®488	495	519
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 Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin						
Approx. Protein Concentrations	IgG concentration 0.05mg/ml						

Immunogen	Extracellular portion of mouse CD152 fused to a mouse IgG2a.
External Database Links	<p>UniProt: P09793 Related reagents</p> <p>Entrez Gene: 12477 Ctla4 Related reagents</p>
Synonyms	Cd152
RRID	AB_10673813
Fusion Partners	Lymph cells from immunized Armenian hamsters were fused with cells of the murine SP2/0 myeloma cell line.
Specificity	<p>Hamster anti Mouse CD152 antibody, clone 1B8 recognizes mouse CD152, also known as CTLA-4 (cytotoxic T-lymphocyte protein 4), a structural homolog for CD28. CD152 binds the same ligands as CD28, namely CD80 (B7.1) and CD86 (B7.2), but with much higher affinity. However, while binding of CD28 enhances T cell function, binding of CD152 inhibits it. CD152 is not detected on naïve T-cells and is induced upon T-cell activation.</p> <p>In mice, lack of CD152 leads to massive lymphoproliferative disorder leading to tissue destruction and autoimmunity, suggesting a critical role for CD152 in limiting T-cell responses. CD152 has been shown to reduce IL-2 production after ligation and can inhibit T-cell expansion. This regulatory role and the high binding affinity of CD152 make it a potential therapy for autoimmune diseases such as rheumatoid arthritis.</p> <p>Hamster anti Mouse CD152 antibody, clone 1B8 may be used to enhance proliferation and pro-inflammatory cytokines of lymph node cells. It may also be used to enhance tumor immunity.</p>
Flow Cytometry	<p>Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.</p> <p>The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).</p>
References	<ol style="list-style-type: none"> Walunas, T. L. <i>et al.</i> (1994) CTLA-4 can function as a negative regulator of T cell activation. Immunity 1: 405-413. Verhagen, J. <i>et al.</i> (2013) CTLA-4 controls the thymic development of both conventional and regulatory T cells through modulation of the TCR repertoire. Proc Natl Acad Sci U S A. 110 (3): E221-30.
Further Reading	1. Karandikar, N.J. <i>et al.</i> (1996) CTLA-4: a negative regulator of autoimmune disease. J Exp Med. 184 (2): 783-8.
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for

short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA4636A488>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[HAMSTER \(ARMENIAN\) IgG NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA2356A488\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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