

Datasheet: MCA2690A488

Description:	HAMSTER ANTI MOUSE CD3:Alexa Fluor®488
Specificity:	CD3
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	145-2C11
Isotype:	IgG
Quantity:	1 ml

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 G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative	0.09% Sodium Azide (NaN ₃)						
Stabilisers	1% Bovine Serum Albumin						
Approx. Protein Concentrations	IgG concentration 0.05mg/ml						
Immunogen	H-2K ^b - specific mouse cytotoxic T lymphocyte clone BM10-37.						
External Database Links	<p>UniProt:</p> <p>P22646 Related reagents</p> <p>Entrez Gene:</p>						

Fusion Partners	Spleen cells from hyperimmunized Armenian hamsters (<i>Cricetulus migratorius</i>) were fused with cells of the murine SP2/0 myeloma.
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Specificity	<p>Hamster anti Mouse CD3 antibody, clone 145-2C11 detects CD3 epsilon (CD3ϵ), a ~20 kDa transmembrane protein also known as CD3 or T3. CD3ϵ is a member of the CD3 complex which consists of four subunits, gamma, delta, epsilon and zeta, and these are associated to the T cell receptor (TCR). TCR plays a critical role in T cell development and function, and is responsible for ligand recognition. It interacts non-covalently with the CD3 dimers delta/epsilon, gamma/epsilon and zeta/zeta which transduce signals from the TCR into the cell.</p> <p>CD3ϵ is primarily expressed on T cells, NK-T cells, and at different levels on thymocytes during T cell differentiation.</p> <p>Hamster anti Mouse CD3 antibody, clone 145-2C11 is useful for <i>in vitro</i> blocking and activation assays, as well as apoptosis induction and <i>in vitro</i> T cell depletions.</p>
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Flow Cytometry	<p>Use 10ul of the suggested working dilution to label 1x10⁶ 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>
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References	<ol style="list-style-type: none">1. Leo, O. <i>et al.</i> (1987) Identification of a monoclonal antibody specific for a murine T3 polypeptide. Proc Natl Acad Sci U S A. 84 (5): 1374-8.2. Payer, E. <i>et al.</i> (1991) Circulating CD3+/T cell receptor V γ 3+ fetal murine thymocytes home to the skin and give rise to proliferating dendritic epidermal T cells. J Immunol. 146 (8): 2536-43.3. Salvadori, S. <i>et al.</i> (1994) Abnormal signal transduction by T cells of mice with parental tumors is not seen in mice bearing IL-2-secreting tumors. J Immunol. 153 (11): 5176-82.4. Podd BS <i>et al.</i> (2006) T cells in cryptopatch aggregates share TCR γ variable region junctional sequences with $\gamma\delta$ T cells in the small intestinal epithelium of mice. J Immunol. 176 (11): 6532-42.5. McDole JR <i>et al.</i> (2010) Rapid formation of extended processes and engagement of Theiler's virus-infected neurons by CNS-infiltrating CD8 T cells. Am J Pathol. 177 (4): 1823-33.6. Lees, C.W. <i>et al.</i> (2008) Analysis of germline GLI1 variation implicates hedgehog signalling in the regulation of intestinal inflammatory pathways. PLoS Med. 5: e239.7. Klemann, C. <i>et al.</i> (2015) Interleukin-17, Produced by $\gamma\delta$-T Cells, Contributes to Hepatic Inflammation in a Mouse Model of Biliary Atresia and is Increased in Livers of Patients. Gastroenterology. pii: S0016-5085(15)01352-9.8. Parang, B. <i>et al.</i> (2016) Myeloid translocation genes differentially regulate colorectal cancer programs. Oncogene. 35 (49): 6341-9.9. Schuhmann, M.K. <i>et al.</i> (2017) Blocking of platelet glycoprotein receptor Ib reduces "thrombo-inflammation" in mice with acute ischemic stroke. J Neuroinflammation. 14 (1): 18.10. Yu, Y. <i>et al.</i> (2017) Conventional alpha beta ($\alpha\beta$) T cells do not contribute to acute intestinal ischemia-reperfusion injury in mice. PLoS One. 12 (7): e0181326.11. Certo, M. <i>et al.</i> (2015) Activation of RXR/PPARγ underlies neuroprotection by bexarotene in ischemic stroke. Pharmacol Res. 102: 298-307.12. Perrotta, M. <i>et al.</i> (2018) Deoxycorticosterone acetate-salt hypertension activates placental growth factor in the spleen to couple sympathetic drive and immune system activation. Cardiovasc Res. 114 (3): 456-67.
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Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p>
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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.

Shelf Life 18 months from date of despatch.

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

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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