

## Datasheet: MCA2302A488

<b>Description:</b>	RAT ANTI MOUSE CD70:Alexa Fluor® 488
<b>Specificity:</b>	CD70
<b>Other names:</b>	TNFSF7
<b>Format:</b>	ALEXA FLUOR® 488
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	FR70
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

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 the appropriate negative/positive controls.

<b>Target Species</b>	Mouse						
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor® 488 - liquid						
<b>Max Ex/Em</b>	<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
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Alexa Fluor®488	495	519					
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
<b>Buffer Solution</b>	Phosphate buffered saline						
<b>Preservative</b>	0.09% Sodium Azide						
<b>Stabilisers</b>	1% Bovine Serum Albumin						
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml						
<b>Immunogen</b>	A20 mouse B cell lymphoma cell line						
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">O55237</a> <a href="#">Related reagents</a>						

**Entrez Gene:**

[21948](#) Cd70 [Related reagents](#)

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<b>Synonyms</b>	Cd27l, Cd27lg, Tnfsf7
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<b>Fusion Partners</b>	Spleen cells from immunized F344/DuCrj rats were fused with cells of the mouse P3U1 myeloma cell line
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<b>Specificity</b>	<p><b>Rat anti Mouse CD70 antibody, clone FR70</b> recognizes mouse CD70, a 30-33 kDa type II transmembrane protein belonging to the TNF superfamily. CD70 is not expressed on resting T cells and B cells but expression is induced on activation. Interaction of CD70 with its ligand CD27 is reported to play an important role in T cell co-stimulation and the regulation of T-dependant B cell activation and antibody production.</p> <p>Clone FR70 is reported to block the functions of CD70 and has been used to block the interactions between CD27 and CD70 (<a href="#">Oshima et al.</a>).</p>
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul. 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 ( <a href="#">BUF041A/B</a> ).
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<b>References</b>	<ol style="list-style-type: none"><li>1. Oshima, H. <i>et al.</i> (1998) Characterization of murine CD70 by molecular cloning and mAb. <a href="#">Int Immunol. 10 (4): 517-26.</a></li><li>2. Takeda, K. <i>et al.</i> (2000) CD27-mediated activation of murine NK cells. <a href="#">J Immunol. 164 (4): 1741-5.</a></li><li>3. Akiba, H. <i>et al.</i> (2000) Critical contribution of OX40 ligand to T helper cell type 2 differentiation in experimental leishmaniasis. <a href="#">J Exp Med. 191 (2): 375-80.</a></li><li>4. Akiba, H. <i>et al.</i> (1999) CD28-independent costimulation of T cells by OX40 ligand and CD70 on activated B cells. <a href="#">J Immunol. 162 (12): 7058-66.</a></li><li>5. Hadziahmetovic, M. <i>et al.</i> (2012) Microarray Analysis of Murine Retinal Light Damage Reveals Changes in Iron Regulatory, Complement, and Antioxidant Genes in the Neurosensory Retina and Isolated RPE. <a href="#">Invest Ophthalmol Vis Sci. 53: 5231-41.</a></li></ol>
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<b>Storage</b>	<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. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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<b>Shelf Life</b>	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>

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**Regulatory**                      For research purposes only

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## Related Products

### Recommended Useful Reagents

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

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

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