

Datasheet: MCA2302PE

Description:	RAT ANTI MOUSE CD70:RPE
Specificity:	CD70
Other names:	TNFSF7
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	FR70
Isotype:	IgG2b
Quantity:	100 TESTS

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 R. Phycoerythrin (RPE) - lyophilized								
Reconstitution	Reconstitute with 1.0 ml distilled water Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.								
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>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578		
Fluorophore	Excitation Max (nm)	Emission Max (nm)							
RPE 488nm laser	496	578							
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 5% Sucrose								
Immunogen	A20 mouse B cell lymphoma cell line								
External Database Links	UniProt:								

[O55237](#) [Related reagents](#)

Entrez Gene:

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

Synonyms	Cd27l, Cd27lg, Tnfsf7
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Fusion Partners	Spleen cells from immunized F344/DuCrj rats were fused with cells of the mouse P3U1 myeloma cell line
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Specificity	<p>Rat anti Mouse CD70 antibody, clone FR70 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 (Oshima et al.).</p>
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Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ 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 (BUF041A/B).
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References	<ol style="list-style-type: none">Oshima, H. <i>et al.</i> (1998) Characterization of murine CD70 by molecular cloning and mAb. Int Immunol. 10 (4): 517-26.Takeda, K. <i>et al.</i> (2000) CD27-mediated activation of murine NK cells. J Immunol. 164 (4): 1741-5.Akiba, H. <i>et al.</i> (2000) Critical contribution of OX40 ligand to T helper cell type 2 differentiation in experimental leishmaniasis. J Exp Med. 191 (2): 375-80.Akiba, H. <i>et al.</i> (1999) CD28-independent costimulation of T cells by OX40 ligand and CD70 on activated B cells. J Immunol. 162 (12): 7058-66.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. Invest Ophthalmol Vis Sci. 53: 5231-41.
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Storage	<p>Prior to reconstitution store at +4°C.</p> <p>After reconstitution store at +4°C.</p> <p>DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light.</p>
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Guarantee	12 months from date of reconstitution
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Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.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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