

Datasheet: MCA2302PE

BATCH NUMBER INN1701

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	<p>UniProt: O55237 Related reagents</p> <p>Entrez Gene: 21948 Cd70 Related reagents</p>
Synonyms	Cd27l, Cd27lg, Tnfsf7
Fusion Partners	Spleen cells from immunized F344/DuCrj rats were fused with cells of the mouse P3U1 myeloma cell line
Specificity	<p>Rat anti Mouse CD70 antibody, clone FR70 recognizes mouse CD70, a ~30-33 kDa single pass type II transmembrane glycoprotein 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 (Nolte <i>et al.</i> 2009).</p> <p>Rat anti Mouse CD70 antibody, clone FR70 blocks functionality of CD70 and has been used to block the interactions between CD27 and CD70 (Oshima <i>et al.</i>).</p>
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).
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.
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>
Guarantee	12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #20487 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA2302PE>
20487

Regulatory For research purposes only

Related Products

Recommended Useful Reagents

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

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

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

 Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

 Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

 Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

'M375459:210104'

Printed on 12 Aug 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)