

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	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 (NaN₃)

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 et al. 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 et al.).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl. The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/BUF041B).
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. After reconstitution store at +4°C. DO NOT FREEZE.</p> <p>This product should be stored undiluted. 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>

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)

'M419289:230616'

Printed on 12 Aug 2023

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