

Datasheet: MCA2302A647

Description:	RAT ANTI MOUSE CD70:Alexa Fluor® 647
Specificity:	CD70
Other names:	TNFSF7
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	FR70
Isotype:	IgG2b
Quantity:	100 TESTS/1ml

Product Details

RRID AB_566879

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 - 1/5

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.

Target Species Mouse

Product Form Purified IgG conjugated to Alexa Fluor® 647 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665

Preparation Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide
Stabilisers 1% Bovine Serum Albumin

Approx. Protein Concentrations IgG concentration 0.05 mg/ml

Immunogen A20 mouse B cell lymphoma cell line

External Database Links **UniProt:**

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">1. Oshima, H. <i>et al.</i> (1998) Characterization of murine CD70 by molecular cloning and mAb. Int Immunol. 10 (4): 517-26.2. Takeda, K. <i>et al.</i> (2000) CD27-mediated activation of murine NK cells. J Immunol. 164 (4): 1741-5.3. 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): 375-80.4. 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): 7058-66.5. 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. Invest Ophthalmol Vis Sci. 53: 5231-41.
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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> <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>
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Guarantee	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 Useful Reagents

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

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

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