

Datasheet: MCA1553A647

BATCH NUMBER 165419

Description:	RAT ANTI HUMAN INTERLEUKIN-2:Alexa Fluor® 647
Specificity:	IL-2
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	MQ1-17H12
Isotype:	IgG2a
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	▪			NT - 1/2

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.

(1) Membrane permeabilization is required for this application. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.

Target Species

Human

Species Cross Reactivity

Reacts with: Cynomolgus monkey

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

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 (NaN ₃)
Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
External Database Links	<p>UniProt: P60568 Related reagents</p> <p>Entrez Gene: 3558 IL2 Related reagents</p>
Specificity	<p>Rat anti Human Interleukin-2 antibody, clone MQ1-17H12 recognizes human interleukin-2 (IL-2), also known as T-cell growth factor or Aldesleukin. IL-2 is a 153 amino acid secreted cytokine produced by T-cells following antigenic or mitogenic stimulation. It plays a crucial role in T-cell proliferation and immune regulation.</p> <p>Rat anti Human Interleukin-2 antibody, clone MQ1-17H12 has been successfully used for the detection and measurement of native and recombinant human IL-2 using flow cytometry and ELISA where it acts as the capture reagent in a very sensitive assay for IL-2 determination in human samples. IL-2 is used extensively for the treatment of patients with metastatic melanoma (Atkins et al. 1999) and renal cancer with reproducible beneficial effects (Rosenberg 2014). Monitoring of IL-2 levels in such patients is required for optimization of treatment regimens (Lotze et al. 1986). Rat anti Human Interleukin-2 antibody, clone MQ1-17H12 is also useful for evaluating levels of IL-2 in patients with autoimmune conditions including lupus erythematosus and rheumatoid arthritis where there may be an impaired ability to produce IL-2 (Talal et al. 1983).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 1x10 ⁶ cells in 100µl
References	<ol style="list-style-type: none"> 1. Garbe, Y. <i>et al.</i> (2011) Semiallogenic fusions of MSI(+) tumor cells and activated B cells induce MSI-specific T cell responses. BMC Cancer. 11: 410. 2. Moncrieffe, H. <i>et al.</i> (2010) High expression of the ectonucleotidase CD39 on T cells from the inflamed site identifies two distinct populations, one regulatory and one memory T cell population. J Immunol. 185 (1): 134-43.
Storage	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
Guarantee	12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1553A647>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA6005A647\)](#)

North & South America	Tel: +1 800 265 7376 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
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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)
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