

Datasheet: MCA1302G

Description:	RAT ANTI MOUSE INTERLEUKIN-10
Specificity:	IL-10
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	JES5-2A5
Isotype:	IgG1
Quantity:	0.5 mg

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)	▪			1/10 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			1/200 - 1/2000
Immunoprecipitation			▪	
Western Blotting	▪			1/1000

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	Mouse
Species Cross Reactivity	<p>Reacts with: Goat</p> <p>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.</p>
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture

	supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant Mouse IL-10.
External Database Links	<p>UniProt: P18893 Related reagents</p> <p>Entrez Gene: 16153 IL10 Related reagents</p>
Synonyms	IL-10
RRID	AB_2125093
Fusion Partners	Spleen cells from immunized rats were fused with cells of the mouse P3.X63 Ag8.653 myeloma cell line.
Specificity	<p>Rat anti Mouse Interleukin-10 antibody, clone JES5-2A5 recognizes mouse Cytokine synthesis inhibitory factor (CSIF), also known as interleukin-10 (IL-10). IL-10 is produced by Ly-1(CD5) expressing B cells (O'Garra et al. 1992) and a subset of stimulated T cells (Asseman et al. 1999).</p> <p>IL-10 has a wide range of biological properties, including the inhibition of macrophage and T helper cell mediated cytokine synthesis, and the suppression of the delayed hypersensitivity response.</p> <p>Rat anti Mouse Interleukin-10 antibody, clone JES5-2A5 is reported to neutralize the activity of murine IL-10 (Weber-Nordt et al. 1994).</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. Sander, B. <i>et al.</i> (1993) Similar frequencies and kinetics of cytokine producing cells in murine peripheral blood and spleen. Cytokine detection by immunoassay and intracellular immunostaining. J Immunol Methods. 166 (2): 201-14. 2. Nishigori, C. <i>et al.</i> (1998) HindIII liposomes suppress delayed-type hypersensitivity responses <i>in vivo</i> and induce epidermal IL-10 <i>in vitro</i>. J Immunol. 161 (6): 2684-91. 3. Weber-nordt, R.M. <i>et al.</i> (1994) Lipopolysaccharide-dependent induction of IL-10 receptor expression on murine fibroblasts. J Immunol. 153 (8): 3734-44.

4. Rennick, D. *et al.* (1995) Cofactors are essential for stem cell factor-dependent growth and maturation of mast cell progenitors: comparative effects of interleukin-3 (IL-3), IL-4, IL-10, and fibroblasts. [Blood. 85: 57-65.](#)
5. Biswas, S.K. *et al.* (2006) A distinct and unique transcriptional program expressed by tumor-associated macrophages (defective NF-kappaB and enhanced IRF-3/STAT1 activation). [Blood. 107: 2112-22.](#)
6. Gaupp, S. *et al.* (2008) Amelioration of experimental autoimmune encephalomyelitis in IL-4Ralpha-/- mice implicates compensatory up-regulation of Th2-type cytokines. [Am J Pathol. 173: 119-29.](#)
7. Gonzalez-Juarrero, M. *et al.* (2013) Polar Lipids of *Burkholderia pseudomallei* Induce Different Host Immune Responses. [PLoS One. 8: e80368.](#)
8. Higgins, J.L. *et al.* (2018) Cell mediated immune response in goats after experimental challenge with the virulent *Brucella melitensis* strain 16M and the reduced virulence strain Rev. 1. [Vet Immunol Immunopathol. 202: 74-84.](#)
9. Hammond, J.W. *et al.* (2018) HIV Tat causes synapse loss in a mouse model of HIV-associated neurocognitive disorder that is independent of the classical complement cascade component C1q. [Glia. 66 \(12\): 2563-74.](#)
10. Tang, S.Y. *et al.* (2023) Granulocyte Colony-Stimulating Factor Improves Endothelial Progenitor Cell-Mediated Neovascularization in Mice with Chronic Kidney Disease. [Pharmaceutics. 15 \(10\): 2380.](#)
11. Arad, T. *et al.* (2021) CD200 -dependent and -independent immune-modulatory functions of neural stem cells. [Stem Cell Res. 56: 102559.](#)
12. Bellizzi, M.J. *et al.* (2018) The Mixed-Lineage Kinase Inhibitor URM-099 Protects Hippocampal Synapses in Experimental Autoimmune Encephalomyelitis. [eNeuro. 5 \(6\): ENEURO.0245-18.](#)
13. Kontogianni, G.I. *et al.* (2025) A Mechanically Stimulated Co-culture in 3-Dimensional Composite Scaffolds Promotes Osteogenic and Anti-osteoclastogenic Activity and M2 Macrophage Polarization. [Biomater Res. 29: 0135.](#)

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
Health And Safety Information	<p>Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1302G</p> <p>10040</p>
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC

North & South America	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		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

'M437957:250320'

Printed on 20 Mar 2025