

Datasheet: MCA2250EL

Description:	RAT ANTI HUMAN INTERLEUKIN-10:Low Endotoxin
Specificity:	IL-10
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	JES3-12G8
Isotype:	IgG2a
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)	▪			
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (2)	▪			1/100
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			1/100 - 1/250

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 permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

(2) **This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

Target Species	Human
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	None present
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen	Human IL-10 expressed by COS cells.
External Database Links	<p>UniProt: P22301 Related reagents</p> <p>Entrez Gene: 3586 IL10 Related reagents</p>
Specificity	<p>Rat anti Human Interleukin-10 antibody, clone JES3-12G8 recognizes human Interleukin-10 (IL-10). IL-10 is expressed by activated CD8+ peripheral blood T-cells, activated T-helper CD4+ T cell clones mast cells, B cell lymphomas and LPS activated monocytes.</p> <p>Rat anti Human Interleukin-10 antibody, clone JES3-12G8 is reported to neutralize the effects of IL-10 (Abrams <i>et al.</i> 1992).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul
Histology Positive Control Tissue	Human tonsil
References	<ol style="list-style-type: none"> Burdin, N. <i>et al.</i> (1993) Epstein-Barr virus transformation induces B lymphocytes to produce human interleukin 10. J Exp Med. 177 (2): 295-304. Abrams, J.S. <i>et al.</i> (1992) Strategies of anti-cytokine monoclonal antibody development: immunoassay of IL-10 and IL-5 in clinical samples. Immunol Rev. 127: 5-24. Yssel, H. <i>et al.</i> (1992) IL-10 is produced by subsets of human CD4+ T cell clones and peripheral blood T cells. J Immunol. 149 (7): 2378-84. O'Farrell, A.M. <i>et al.</i> (1998) IL-10 inhibits macrophage activation and proliferation by distinct signaling mechanisms: evidence for Stat3-dependent and -independent pathways. EMBO J. 17 (4): 1006-18. Wakkach, A. <i>et al.</i> (2001) Differentiation of regulatory T cells 1 is induced by CD2 costimulation. J Immunol. 167: 3107-13. Zajac, A. <i>et al.</i> (2007) Protein microarrays and quantum dot probes for early cancer detection. Colloids Surf B Biointerfaces. 58: 309-14. Dybiec, M. <i>et al.</i> (2007) Photoluminescence spectroscopy of bioconjugated CdSe/ZnS quantum dots Applied Physics Letters. 90 (26): 263112. Ramgir, N.S. <i>et al.</i> (2007) Voltammetric Detection of Cancer Biomarkers Exemplified by Interleukin-10 and Osteopontin with Silica Nanowires The Journal of Physical Chemistry C. 111 (37): 13981-7. van der Vlugt, L.E.P.M. <i>et al.</i> (2014) CD24^(hi)CD27⁽⁺⁾ B cells from patients with allergic asthma have impaired regulatory activity in response to lipopolysaccharide. Clin Exp Allergy. 44 (4): 517-28. Prośniak, M. <i>et al.</i> (2013) Glioma grade is associated with the accumulation and activity of cells bearing M2 monocyte markers. Clin Cancer Res. 19 (14): 3776-86. Zhang, W. <i>et al.</i> (2013) Myeloid clusters are associated with a pro-metastatic environment and poor prognosis in smoking-related early stage non-small cell lung cancer. PLoS One. 8 (5): e65121. van der Vlugt, E.P.M. <i>et al.</i> (2014) Toll-like receptor ligation for the induction of regulatory B cells. Methods Mol Biol. 1190: 127-41. Ramos, R.N. <i>et al.</i> (2020) CD163⁺ tumor-associated macrophage accumulation in breast cancer patients reflects both local differentiation signals and systemic skewing of monocytes. Clin Transl Immunology. 9 (2): e1108.
Further Reading	<ol style="list-style-type: none"> Gomes, J.A. <i>et al.</i> (2003) Evidence that development of severe cardiomyopathy in human

Chagas' disease is due to a Th1-specific immune response. [Infect Immun. 71 \(3\): 1185-93.](#)

Storage	Store at -20°C only. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10162 available at: 10162: https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Low Endotoxin \(MCA6005EL\)](#)

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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