

## Datasheet: MCA2250

<b>Description:</b>	RAT ANTI HUMAN INTERLEUKIN-10
<b>Specificity:</b>	IL-10
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	JES3-12G8
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	▪			
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (2)	▪			1/50 - 1/100
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			1/50 - 1/250

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.

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

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Human IL-10 expressed by COS cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P22301</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3586</a>    IL10    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_2125383
<b>Specificity</b>	<p><b>Rat anti Human Interleukin-10 antibody, clone JES3-12G8</b> 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 (<a href="#">Abrams <i>et al.</i> 1992</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
<b>Histology Positive Control Tissue</b>	Human Tonsil
<b>References</b>	<ol style="list-style-type: none"> <li>Burdin, N. <i>et al.</i> (1993) Epstein-Barr virus transformation induces B lymphocytes to produce human interleukin 10. <a href="#">J Exp Med. 177 (2): 295-304.</a></li> <li>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. <a href="#">Immunol Rev. 127: 5-24.</a></li> <li>Yssel, H. <i>et al.</i> (1992) IL-10 is produced by subsets of human CD4+ T cell clones and peripheral blood T cells. <a href="#">J Immunol. 149 (7): 2378-84.</a></li> <li>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. <a href="#">EMBO J. 17 (4): 1006-18.</a></li> <li>Wakkach, A. <i>et al.</i> (2001) Differentiation of regulatory T cells 1 is induced by CD2 costimulation. <a href="#">J Immunol. 167: 3107-13.</a></li> <li>Zajac, A. <i>et al.</i> (2007) Protein microarrays and quantum dot probes for early cancer detection. <a href="#">Colloids Surf B Biointerfaces. 58: 309-14.</a></li> <li>Dybiec, M. <i>et al.</i> (2007) Photoluminescence spectroscopy of bioconjugated CdSe/ZnS quantum dots <a href="#">Applied Physics Letters. 90 (26): 263112.</a></li> <li>Ramgir, N.S. <i>et al.</i> (2007) Voltammetric Detection of Cancer Biomarkers Exemplified by Interleukin-10 and Osteopontin with Silica Nanowires <a href="#">The Journal of Physical Chemistry</a></li> </ol>

[C. 111 \(37\): 13981-7.](#)

9. van der Vlugt, L.E.P.M. *et al.* (2014) CD24<sup>(hi)</sup>CD27<sup>(+)</sup> B cells from patients with allergic asthma have impaired regulatory activity in response to lipopolysaccharide. [Clin Exp Allergy. 44 \(4\): 517-28.](#)

10. Prośniak, M. *et al.* (2013) Glioma grade is associated with the accumulation and activity of cells bearing M2 monocyte markers. [Clin Cancer Res. 19 \(14\): 3776-86.](#)

11. Zhang, W. *et al.* (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.](#)

12. van der Vlugt, E.P.M. *et al.* (2014) Toll-like receptor ligation for the induction of regulatory B cells. [Methods Mol Biol. 1190: 127-41.](#)

13. Ramos, R.N. *et al.* (2020) CD163<sup>+</sup> tumor-associated macrophage accumulation in breast cancer patients reflects both local differentiation signals and systemic skewing of monocytes. [Clin Transl Immunology. 9 \(2\): e1108.](#)

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**Further Reading** 1. Gomes, J.A. *et al.* (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.](#)

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**Storage** 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.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2250>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@800</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight@800</a>

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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