

## Datasheet: MCA2250EL

<b>Description:</b>	RAT ANTI HUMAN INTERLEUKIN-10:Low Endotoxin
<b>Specificity:</b>	IL-10
<b>Format:</b>	Low Endotoxin
<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)	▪			1/100
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.**

<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>	None present
<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>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>1. Brodeur, N.D. and Spencer, J.V. (2010) Antibodies to human IL-10 neutralize ebvIL-10-mediated cytokine suppression but have no effect on cmvIL-10 activity. <a href="#">Virus Res. 153: 265-8.</a></li> <li>2. 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>3. 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>4. 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>5. 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>6. Dybiec, M. <i>et al.</i> (2007) Photoluminescence spectroscopy of bioconjugated CdSe/ZnS quantum dots <a href="#">Appl. Phys. Lett. 90, 263112.</a></li> <li>7. Ramgir, N.S. <i>et al.</i> (2007) Voltammetric Detection of Cancer Biomarkers Exemplified by Interleukin-10 and Osteopontin with Silica Nanowires <a href="#">J. Phys. Chem. C, 111:13981-7.</a></li> <li>8. 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> </ol>
<b>Further Reading</b>	<ol style="list-style-type: none"> <li>1. 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. <a href="#">Infect Immun. 71 (3): 1185-93.</a></li> <li>2. 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> </ol>
<b>Storage</b>	<p>Store at -20°C only.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>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.</p>
<b>Guarantee</b>	18 months from date of despatch
<b>Health And Safety</b>	Material Safety Datasheet documentation #10162 available at:

**Information** 10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight@800</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight@649</a> , <a href="#">DyLight@800</a>

### Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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