

## Datasheet: MCA1304G

**BATCH NUMBER 151117**

<b>Description:</b>	RAT ANTI MOUSE INTERLEUKIN-4
<b>Specificity:</b>	IL-4
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	BVD4-1D11
<b>Isotype:</b>	IgG2b
<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)	▪			1/10 - 1/50
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			1ug/ml - 5ug/ml
Immunoprecipitation			▪	
Western Blotting	▪			1ug/ml - 5ug/ml

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 appropriate negative/positive controls.

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

<b>Target Species</b>	Mouse
<b>Species Cross Reactivity</b>	Does not react with:Rat
<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
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Recombinant Mouse IL-4.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P07750</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">16189</a>    II4    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Il-4
<b>RRID</b>	AB_322398
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the mouse P3.X63 Ag8.653 myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse Interleukin-4 antibody, clone BVD4-1D11</b> recognizes natural and recombinant mouse IL-4.</p> <p>Clone BVD4-1D11 is reported to neutralize IL-4 activity (<a href="#">Abrams <i>et al.</i>, 1992</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <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>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. <a href="#">J Immunol Methods. 166 (2): 201-14.</a></li> <li>Hochrein, H. <i>et al.</i> (2000) Interleukin (IL)-4 is a major regulatory cytokine governing bioactive IL-12 production by mouse and human dendritic cells. <a href="#">J Exp Med. 192 (6): 823-33.</a></li> <li>Pechová, J. <i>et al.</i> (2004) Effect of tick salivary gland extract on the cytokine production by mouse epidermal cells. <a href="#">Folia Parasitol (Praha). 51: 367-72.</a></li> <li>Finkelman, F.D. <i>et al.</i> (2000) Stat6 regulation of <i>in vivo</i> IL-4 responses. <a href="#">J Immunol. 164: 2303-10.</a></li> <li>Hochrein, H. <i>et al.</i> (2000) Interleukin (IL)-4 is a major regulatory cytokine governing bioactive IL-12 production by mouse and human dendritic cells. <a href="#">J Exp Med. 192: 823-33.</a></li> <li>Urban, J.F. Jr. <i>et al.</i> (2000) Stat6 signaling promotes protective immunity against <i>Trichinella spiralis</i> through a mast cell- and T cell-dependent mechanism. <a href="#">J Immunol. 164: 2046-52.</a></li> </ol>

8. Yang, Y.F. *et al.* (2000) Requirement for IFN-gamma in IL-12 production induced by collaboration between v(alpha)14(+) NKT cells and antigen-presenting cells. [Int Immunol. 12: 1669-75.](#)
9. Roy, E. *et al.* (2008) Beneficial effect of anti-interleukin-4 antibody when administered in a murine model of tuberculosis infection. [Tuberculosis \(Edinb\). 88 \(3\): 197-202.](#)

<b>Storage</b>	Store at +4°C or at -20°C if preferred.  This product should be stored undiluted.  Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1304G">https://www.bio-rad-antibodies.com/SDS/MCA1304G</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

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

<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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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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