

Datasheet: MCA1304G

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

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	Does not react with:Rat
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-4.
External Database Links	<p>UniProt: P07750 Related reagents</p> <p>Entrez Gene: 16189 I4 Related reagents</p>
Synonyms	II-4
RRID	AB_322398
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse P3.X63 Ag8.653 myeloma cell line.
Specificity	<p>Rat anti Mouse Interleukin-4 antibody, clone BVD4-1D11 recognizes natural and recombinant mouse IL-4.</p> <p>Clone BVD4-1D11 is reported to neutralize IL-4 activity (Abrams et al., 1992).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 1x10 ⁶ cells in 100µl
References	<ol style="list-style-type: none"> 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. 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. 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. J Exp Med. 192 (6): 823-33. Finkelman, F.D. <i>et al.</i> (2000) Stat6 regulation of <i>in vivo</i> IL-4 responses. J Immunol. 164: 2303-10. 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. J Exp Med. 192: 823-33. 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. J Immunol. 164: 2046-52. Yang, Y.F. <i>et al.</i> (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.

8. Pechová, J. *et al.* (2004) Effect of tick salivary gland extract on the cytokine production by mouse epidermal cells. [Folia Parasitol \(Praha\). 51: 367-72.](#)
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.](#)

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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1304G>
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Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

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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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