

## Datasheet: MCA1525

<b>Description:</b>	RAT ANTI HUMAN INTERLEUKIN-4
<b>Specificity:</b>	IL-4
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MP4-25D2
<b>Isotype:</b>	IgG1
<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	▪			
Immunoprecipitation			▪	
Western Blotting	▪			1/500 - 1/1000

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 recommend the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Rhesus Monkey <b>N.B.</b> Antibody reactivity and working conditions may vary between species.
<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>	Purified CHO cell expressed recombinant human IL-4.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P05112</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3565</a>   IL4   <a href="#">Related reagents</a></p>
<b>Specificity</b>	<p><b>Rat anti Human Interleukin-4 antibody, clone MP4-25D2</b> recognizes human Interleukin-4 (IL-4), also known as B-cell stimulatory factor 1, Binetrakin, Pitrakinra or Lymphocyte stimulatory factor 1. Interleukin-4 is a 153 amino acid ~17kDa cytokine involved in the activation of B cells, macrophages and monocytes (UniProt: P05112).</p> <p>Polymorphisms in the IL-4 gene are associated with susceptibility to, and outcome of ischemic stroke (<a href="#">Marousi et al. 2011</a>).</p> <p>Rat anti Human Interleukin-4 antibody, clone MP4-25D2 is reported to neutralize IL-4 activity (<a href="#">Abrams et al. 1992</a> and <a href="#">Carvalho et al. 1994</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>1. Krohn, A.J. <i>et al.</i> (1998) Staurosporine-induced apoptosis of cultured rat hippocampal neurons involves caspase-1-like proteases as upstream initiators and increased production of superoxide as a main downstream effector. <a href="#">J Neurosci. 18 (20): 8186-97.</a></li> <li>2. Kubota, M. <i>et al.</i> (1997) Oral immunization with simian immunodeficiency virus p55gag and cholera toxin elicits both mucosal IgA and systemic IgG immune responses in nonhuman primates. <a href="#">J Immunol. 158 (11): 5321-9.</a></li> <li>3. 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>4. Patterson, B.K. <i>et al.</i> (2001) Leukemia inhibitory factor inhibits HIV-1 replication and is upregulated in placentae from nontransmitting women. <a href="#">J Clin Invest. 107 (3): 287-94.</a></li> <li>5. Carvalho, E.M. <i>et al.</i> (1994) Restoration of IFN-gamma production and lymphocyte proliferation in visceral leishmaniasis. <a href="#">J Immunol. 152 (12): 5949-56.</a></li> </ol>
<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>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.</p>
<b>Shelf Life</b>	18 months from date of despatch.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: 10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®549</a> , <a href="#">DyLight®649</a> , <a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>

### Recommended Negative Controls

[RAT IgG1 NEGATIVE CONTROL \(MCA6004GA\)](#)

<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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