

Datasheet: MCA1525

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

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	Human
Species Cross Reactivity	<p>Reacts with: Rhesus Monkey</p> <p>N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
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 (NaN₃)

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0 mg/ml

Immunogen Purified CHO cell expressed recombinant human IL-4.

External Database Links

UniProt:
[P05112](#) [Related reagents](#)

Entrez Gene:
[3565](#) IL4 [Related reagents](#)

RRID AB_567085

Specificity **Rat anti Human Interleukin-4 antibody, clone MP4-25D2** 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).

Polymorphisms in the IL-4 gene are associated with susceptibility to, and outcome of ischemic stroke ([Marousi et al. 2011](#)).

Rat anti Human Interleukin-4 antibody, clone MP4-25D2 is reported to neutralize IL-4 activity ([Abrams et al. 1992](#) and [Carvalho et al. 1994](#)).

Flow Cytometry Use 10µl of the suggested working dilution to label 1x10⁶ cells in 100µl

References

1. Abrams, J.S. *et al.* (1992) Strategies of anti-cytokine monoclonal antibody development: immunoassay of IL-10 and IL-5 in clinical samples. [Immunol Rev. 127: 5-24.](#)
2. Carvalho, E.M. *et al.* (1994) Restoration of IFN-gamma production and lymphocyte proliferation in visceral leishmaniasis. [J Immunol. 152 \(12\): 5949-56.](#)
3. P, M. *et al.* (2004) Tumor-derived MUC1 mucins interact with differentiating monocytes and induce IL-10^{high}IL-12^{low} regulatory dendritic cell. [J Immunol. 172 \(12\): 7341-9.](#)
4. Raulf-Heimsoth, M. (2008) T cell - primary culture from peripheral blood. [Methods Mol Med. 138: 17-30.](#)

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
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1525 10040
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

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
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight@550 , DyLight@650 , DyLight@800

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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
'M409939:221021'

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