

# Datasheet: MCA6241B

**BATCH NUMBER 100005151**

<b>Description:</b>	MOUSE ANTI HUMAN INTERLEUKIN-4:Biotin
<b>Specificity:</b>	IL-4
<b>Other names:</b>	BSF-1
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	B03-6A7
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 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
ELISA	▪			1.0 ug/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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG conjugated to Biotin - 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 (NaN <sub>3</sub> ) 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>Immunogen</b>	<i>E. coli</i> derived recombinant human full length interleukin-4 (His25-Ser153)

**External Database****Links****UniProt:**[P05112](#)[Related reagents](#)**Entrez Gene:**[3565](#)

IL4

[Related reagents](#)**Fusion Partners**

Cell fusion between immunized BALB/c mouse spleen cells and mouse myeloma SP2/0

**Specificity**

**Mouse anti Human interleukin-4 antibody, clone B03-6A7**, recognizes interleukin-4 (IL-4) also known as B-cell stimulatory factor 1, binterkin and lymphocyte stimulatory factor 1. IL-4 is a cytokine largely expressed and secreted by CD4<sup>+</sup> T helper cells, basophils, eosinophils, mast cells and natural killer cells ([Junttila 2018](#)). IL-4 is expressed at low levels under physiological conditions, with the levels influenced by hormones, cellular/oxidative stress, infection and inflammation ([McCormick & Heller 2015](#)).

IL-4 plays important roles in both physiological and pathological conditions such as Th2 cell-mediated immunity, IgE and IgG1 class switching in B cells and tissue repair and homeostasis through alternative macrophage activation ([Gadani et al. 2013](#)). The effect of IL-4 is mediated through the receptor IL-4R $\alpha$ . Upon binding of IL-4 to IL-4R $\alpha$ , the complex binds to a secondary receptor chain, IL-2R $\gamma$  or IL-13R $\alpha$ 1. This receptor complex is then able to induce intracellular signaling via JAK1 and JAK3 ([Junttila 2018](#)).

The biotinylated Mouse anti Human interleukin-4 antibody, clone B03-6A7 (MCA6241B) can be used as a detection antibody in a sandwich ELISA with the purified Mouse anti Human interleukin-4 antibody, clone B04-9E1 ([MCA6240GA](#)) as the capture antibody.

**Storage**

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

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.

**Guarantee**

12 months from date of despatch

**Health And Safety Information**

Material Safety Datasheet documentation #10041 available at:

<https://www.bio-rad-antibodies.com/SDS/MCA6241B>

10041

**Regulatory**

For research purposes only

**Related Products****Recommended Useful Reagents**[MOUSE ANTI HUMAN INTERLEUKIN-4 \(MCA6240GA\)](#)**ELISA Matched Pair - Capture Antibody**[MOUSE ANTI HUMAN INTERLEUKIN-4 \(MCA6240GA\)](#)

<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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batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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