

Datasheet: MCA6241B

Description:	MOUSE ANTI HUMAN INTERLEUKIN-4:Biotin
Specificity:	IL-4
Other names:	BSF-1
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	B03-6A7
Isotype:	IgG1
Quantity:	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.

	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.

Target Species	Human
Product Form	Purified IgG conjugated to Biotin - 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) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	<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, binetrakin and lymphocyte stimulatory factor 1. IL-4 is a cytokine largely expressed and secreted by CD4⁺ 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 α . Upon binding of IL-4 to IL-4R α , the complex binds to a secondary receptor chain, IL-2R γ or IL-13R α 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 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 #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 \(MCA6240GA\)](#)

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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

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