

Datasheet: AHP780B

Description:	RABBIT ANTI HUMAN INTERLEUKIN-4:Biotin
Specificity:	IL-4
Format:	Biotin
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	50 µg

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			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA	■			0.25 - 1.0ug/ml
Immunoprecipitation			■	
Western Blotting	■			0.1 - 0.2ug/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 - lyophilised
Reconstitution	Reconstitute with 0.5ml sterile PBS containing 0.1% Bovine Serum Albumin. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution. For long term storage the addition of 0.09% sodium azide is recommended.
Antiserum Preparation	Antisera to human IL-4 were raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG prepared by affinity chromatography.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Approx. Protein Concentrations	IgG concentration 0.1mg/ml after reconstitution.
Immunogen	Recombinant human IL-4

External Database**Links****UniProt:**

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

Entrez Gene:

[3565](#) IL4 [Related reagents](#)

Specificity

Rabbit anti Human Interleukin-4 antibody recognizes human IL-4 (Interleukin-4), also known as B-cell stimulatory factor 1, a 129 amino acid pleiotropic cytokine which interacts with multiple cell lineages, including T cells, fibroblasts and haematopoietic cells, and is one of the most important factors involved in B cell IgG1 and IgE class switching.

IL-4 signalling through the IL-4 receptor (IL-4R), under the influence of Stat6, induces the differentiation of CD4⁺ T cells into Th2 helper cells, which themselves then secrete IL-4 along with IL-5, IL-6, IL-10 and IL-13. Excessive secretion of IL-4 by Th2 helper cells has been linked with allergy and elevated IgE levels.

ELISA

This biotinylated human IL-4 antibody may be used in a direct ELISA or as the detection reagent in a sandwich ELISA with our [purified human IL-4 antibody](#) (AHP780) as the capture reagent and [recombinant human IL-4](#) (PHP234) as the standard.

Further Reading

1. Arai, N. *et al.* (1989) Complete nucleotide sequence of the chromosomal gene for human IL-4 and its expression. [J Immunol. 142 \(1\): 274-82.](#)
 2. Steinke, J.W. & Borish, L. (2001) Th2 cytokines and asthma. Interleukin-4: its role in the pathogenesis of asthma, and targeting it for asthma treatment with interleukin-4 receptor antagonists. [Respir Res. 2 \(2\): 66-70.](#)
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Storage

Prior to reconstitution store at +4°C.
After reconstitution store at -20°C.
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.

Shelf Life

12 months from date of reconstitution.

Health And Safety Information

Material Safety Datasheet documentation #10162 available at:
10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf>

Regulatory

For research purposes only

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