

Datasheet: AHP780

**BATCH NUMBER 144739**

<b>Description:</b>	RABBIT ANTI HUMAN INTERLEUKIN-4
<b>Specificity:</b>	IL-4
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<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
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			
ELISA	▪			0.5 - 2.0ug/ml
Immunoprecipitation			▪	
Western Blotting	▪			0.1 - 0.2ug/ml
Functional Assays	▪			0.03 - 0.05ug/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.

**(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

### Target Species

Human

### Product Form

Purified IgG - lyophilised

### Reconstitution

Reconstitute with 0.1ml distilled water.

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. NB: For functional studies do not add azide.

**Antiserum Preparation** Antisera to human IL-4 were raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG prepared by affinity chromatography.

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**Buffer Solution** Phosphate buffered saline

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**Preservative Stabilisers** None present

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**Carrier Free** Yes

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**Approx. Protein Concentrations** IgG concentration 1.0mg/ml after reconstitution.

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**Immunogen** [Recombinant human IL-4](#)

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**External Database Links**

**UniProt:**

[P05112](#)    [Related reagents](#)

**Entrez Gene:**

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

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**RRID** AB\_609743

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**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<sup>+</sup> 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.

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**ELISA** This purified human IL-4 antibody may be used in ELISA with [recombinant human IL-4](#) (PHP234) as the standard.

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**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 -20°C.  
After reconstitution store at -20°C.

This product should be stored undiluted. 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.

<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10162 available at: <a href="https://www.bio-rad-antibodies.com/SDS/AHP780">https://www.bio-rad-antibodies.com/SDS/AHP780</a> 10162
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

- Sheep Anti Rabbit IgG (STAR34...) [FITC](#)
- Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)
- Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
- Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

### Recommended Useful Reagents

- [ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)
- [TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

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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](https://www.bio-rad-antibodies.com/datasheets)  
'M372548:200706'

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