

Datasheet: AHP780

Description:	RABBIT ANTI HUMAN INTERLEUKIN-4
Specificity:	IL-4
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 mg

Product Details

RRID AB_609743

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 (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.

Buffer Solution Phosphate buffered saline

Preservative None present

Stabilisers

Approx. Protein Concentrations IgG concentration 1.0mg/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 purified human IL-4 antibody may be used in ELISA with [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

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
Sheep Anti Rabbit IgG (STAR36...) [DyLight@488](#), [DyLight@549](#), [DyLight@649](#),
[DyLight@680](#), [DyLight@800](#)
Sheep Anti Rabbit IgG (2AB02...) [Biotin](#)

Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)
[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)
[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

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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Printed on 10 Jan 2019

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