

Datasheet: PMP81

BATCH NUMBER 151336

Description:	RECOMBINANT MOUSE INTERLEUKIN-4
Name:	IL-4
Format:	Rec. Protein
Product Type:	Recombinant Protein
Quantity:	20 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
ELISA	▪			0.2 - 0.4ng/well
Western Blotting	▪			1.5 - 3.0ng/lane
Functional Assays	▪			

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	Mouse
Product Form	Purified recombinant protein - lyophilized
Reconstitution	Reconstitute with 200 µl 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.
Preparation	Purified recombinant IL-4 expressed in <i>E.coli</i>
Preservative Stabilisers	None present
Carrier Free	Yes
Endotoxin Level	< 1.0 EU/ug
Approx. Protein	0.1 mg/ml after reconstitution

Concentrations

External Database

Links

UniProt:

[P07750](#)

[Related reagents](#)

Entrez Gene:

[16189](#)

IL4

[Related reagents](#)

Synonyms

IL-4

Product Information

Recombinant Murine interleukin-4 is an *E.coli* derived preparation of Interleukin-4 (IL-4), also known as B-cell stimulatory factor 1. Interleukin-4 is a 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 acts as a regulator of low affinity Fc receptor for IgE (CD23) expression on both lymphocytes and monocytes.

Protein Molecular Weight

13.5 kDa (120 amino acid residues)

Activity

The ED₅₀ was determined by the dose-dependent proliferation of murine HT-2 cells is < 2.0 ng/ml, corresponding to a specific activity of > 5 x 10⁵ units/mg.

Purity

>98% by SDS PAGE and HPLC

ELISA

PMP81 may be used as a standard in an ELISA application with [AAM36](#).

Western Blotting

PMP81 may be used as a positive control for western blotting applications with [AAM36](#).

References

1. Thomas, M.J. *et al.* (2002) CD8 T cells inhibit IgE via dendritic cell IL-12 induction that promotes Th1 T cell counter-regulation. [J Immunol. 168 \(1\): 216-23.](#)
2. Bénateau, M. *et al.* (2012) Combination of glycolysis inhibition with chemotherapy results in an antitumor immune response. [Proc Natl Acad Sci U S A. 109: 20071-6.](#)
3. Lam, R.S. *et al.* (2016) Unprimed, M1 and M2 Macrophages Differentially Interact with *Porphyromonas gingivalis*. [PLoS One. 11 \(7\): e0158629.](#)

Storage

Prior to reconstitution store at -20°C. Following 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 protein. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

Guaranteed for 3 months from the date of reconstitution or until the date of expiry, whichever comes first. Please see label for expiry date.

Health And Safety

Material Safety Datasheet documentation #10268 available at:

Information

<https://www.bio-rad-antibodies.com/SDS/PMP81>

10268

Regulatory

For research purposes only

**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

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)

'M362407:200501'

Printed on 19 Jan 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)