

Datasheet: PBP006

**BATCH NUMBER 152494**

<b>Description:</b>	RECOMBINANT BOVINE INTERLEUKIN-4
<b>Name:</b>	IL-4
<b>Format:</b>	Rec. Protein
<b>Product Type:</b>	Recombinant Protein
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
ELISA	▪			
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.

<b>Target Species</b>	Bovine
<b>Product Form</b>	Purified recombinant protein - lyophilized
<b>Reconstitution</b>	<p>Reconstitute with 0.5 ml 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.</p> <p>Further dilutions should be made in a buffer containing carrier protein.</p>
<b>Preparation</b>	Recombinant protein expressed in <i>Pichia pastoris</i>
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	None present
<b>Approx. Protein Concentrations</b>	Total protein concentration 0.04 mg/ml after reconstitution

**External Database  
Links**

**UniProt:**

[P30367](#)   [Related reagents](#)

**Entrez Gene:**

[280824](#)   IL4   [Related reagents](#)

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**Product Information**   Interleukin-4 (IL-4) is produced by a range of bovine cells, including T and B lymphocytes, monocytes and macrophages, and plays an important role in the immune response.

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**Protein Molecular Weight**   12.6 kDa

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**Purity**   >95% by SDS PAGE analysis

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**ELISA**   PBP006 has been used as a standard in a sandwich ELISA assay with [MCA2371](#) as the capture antibody and [MCA2372B](#) for detection.

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**References**

1. Pirson, C. *et al.* (2012) Differential effects of Mycobacterium bovis - derived polar and apolar lipid fractions on bovine innate immune cells. [Vet Res. 43: 54.](#)
2. Rodrigues, V. *et al.* (2017) Development of a bead-based multiplexed assay for simultaneous quantification of five bovine cytokines by flow cytometry. [Cytometry A. 91 \(9\): 901-7.](#)
3. Stabel, J.R. *et al.* (2021) Comparative cellular immune responses in calves after infection with *Mycobacterium avium*. subsp. *paratuberculosis*., *M. avium*. subsp. *avium*., *M. kansasii*. and *M. bovis*.. [Vet Immunol Immunopathol. 237: 110268.](#)

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**Storage**

Prior to reconstitution store at +4°C.  
Following reconstitution store at -70°C.  
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.

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**Guarantee**   12 months from date of despatch

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**Health And Safety Information**   Material Safety Datasheet documentation #10209 available at: <https://www.bio-rad-antibodies.com/SDS/PBP006>  
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**Regulatory**   For research purposes only

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## Related Products

### Recommended Useful Reagents

[MOUSE ANTI BOVINE INTERLEUKIN-4 \(MCA2371\)](#)

[MOUSE ANTI BOVINE INTERLEUKIN-4:Biotin \(MCA2372B\)](#)

**North & South America**   Tel: +1 800 265 7376  
Fax: +1 919 878 3751

**Worldwide**   Tel: +44 (0)1865 852 700  
Fax: +44 (0)1865 852 739

**Europe**   Tel: +49 (0) 89 8090 95 21  
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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://bio-rad-antibodies.com/datasheets)

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