

# Datasheet: PBP006 BATCH NUMBER 148156

Description:	RECOMBINANT BOVINE 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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.

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

Links	UniProt: P30367 Related reagents				
	Entrez Gene:  280824 IL4 Related reagents				
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.				
Protein Molecular Weight	12.6 kDa				
Purity	>95% by SDS PAGE analysis				
ELISA	PBP006 has been used as a standard in a sandwich ELISA assay with MCA2371 as the capture antibody and MCA2372B for detection.				
References	<ol> <li>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.</li> <li>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.</li> <li>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.</li> </ol>				
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.				
Guarantee	12 months from date of despatch				
Health And Safety Information	Material Safety Datasheet documentation #10209 available at: <a href="https://www.bio-rad-antibodies.com/SDS/PBP006">https://www.bio-rad-antibodies.com/SDS/PBP006</a> 10209				
Regulatory	For research purposes only				

## **Related Products**

**External Database** 

## **Recommended Useful Reagents**

MOUSE ANTI BOVINE INTERLEUKIN-4 (MCA2371)
MOUSE ANTI BOVINE INTERLEUKIN-4:Biotin (MCA2372B)

North & South Tel: +1 800 265 7376

America 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 Fax: +49 (0) 89 8090 95 50 Email: antibody\_sales\_us@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 'M369468:200529'

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