

# Datasheet: PBP006 BATCH NUMBER 152495

| Description:         | RECOMBINANT BOVINE INTERLEUKIN-4 |  |  |  |
|----------------------|----------------------------------|--|--|--|
| Name:                | IL-4                             |  |  |  |
| Format:              | Rec. Protein                     |  |  |  |
| <b>Product Type:</b> | 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<br>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<br>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<br>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 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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