

## Datasheet: PBP008

<b>Description:</b>	RECOMBINANT BOVINE INTERLEUKIN-1 BETA
<b>Name:</b>	IL-1 BETA
<b>Format:</b>	Purified
<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 protein 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.

#### Target Species

Bovine

#### Species Cross Reactivity

Reacts with: Mouse

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

#### Product Form

Purified Recombinant Protein - lyophilized

#### Reconstitution

Reconstitute with 0.5 ml distilled water.

Further dilutions should be made in a buffer containing carrier protein.

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

Recombinant protein expressed in *Pichia pastoris*

#### Buffer Solution

Phosphate buffered saline

<b>Preservative Stabilisers</b>	None present
<b>Endotoxin Level</b>	< 1.0 EU/ug
<b>Approx. Protein Concentrations</b>	40ug/ml after reconstitution
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P09428</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">281251</a>    IL1B    <a href="#">Related reagents</a></p>
<b>Product Information</b>	<p><b>Recombinant Bovine Interleukin-1 beta</b> is a recombinant peptide corresponding to full-length mature Bovine Interleukin-1 beta (IL-1 beta) expressed by a number of cell types including monocytes, macrophages and endothelial cells.</p> <p>Interleukin-1 beta, a pro-inflammatory cytokine has a wide range of effects, such as promoting T and B cell proliferation and inducing neutrophil chemotaxis.</p>
<b>Protein Molecular Weight</b>	17.7kD
<b>Purity</b>	>95% by SDS PAGE analysis
<b>ELISA</b>	This product may be used as a standard for ELISA applications with the following interleukin-1 beta antibodies: <a href="#">AHP851Z</a> , <a href="#">AHP851B</a> or <a href="#">MCA1658</a> .
<b>References</b>	<ol style="list-style-type: none"> <li>1. Stradner, M.H. <i>et al.</i> (2008) Spingosine-1-phosphate stimulates proliferation and counteracts interleukin-1 induced nitric oxide formation in articular chondrocytes. <a href="#">Osteoarthritis Cartilage. 16: 305-11.</a></li> <li>2. Bougarn, S. <i>et al.</i> (2010) Muramyl dipeptide synergizes with <i>Staphylococcus aureus</i> lipoteichoic acid to recruit neutrophils in the mammary gland and to stimulate mammary epithelial cells. <a href="#">Clin Vaccine Immunol. 17(11):1797-809.</a></li> <li>3. Simojoki, H. <i>et al.</i> (2011) Innate immune response in experimentally induced bovine intramammary infection with <i>Staphylococcus simulans</i> and <i>S. epidermidis</i>. <a href="#">Vet Res. 42: 49.</a></li> <li>4. Vordermeier, M. <i>et al.</i> (2012) Cytokine responses of Holstein and Sahiwal zebu derived monocytes after mycobacterial infection. <a href="#">Trop Anim Health Prod. 44: 651-5.</a></li> <li>5. L, D. <i>et al.</i> (2015) Late production of CXCL8 in ruminant oro-nasal turbinate cells in response to <i>Chlamydia abortus</i> infection. <a href="#">Vet Immunol Immunopathol. 168 (1-2): 97-102.</a></li> <li>6. JA, C. <i>et al.</i> (2017) In utero exposure to LPS alters the postnatal acute-phase response in beef heifers. <a href="#">Innate Immun. 23 (1): 97-108.</a></li> </ol>
<b>Storage</b>	<p>Prior to reconstitution store at +4°C.</p> <p>Following reconstitution store at -70°C.</p> <p>Storage in frost-free freezers is not recommended.</p>

This product should be stored undiluted. 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:  
10209: <https://www.bio-rad-antibodies.com/uploads/MSDS/10209.pdf>

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**Regulatory** For research purposes only

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**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto: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)

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