

## Datasheet: PBP008 BATCH NUMBER 169468

Description:	RECOMBINANT BOVINE INTERLEUKIN-1 BETA
Name:	IL-1 BETA
Format:	Purified
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 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 <i>Pichia pastoris</i>
Source	Pichia pastoris

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Endotoxin Level	< 1.0 EU/ug
Approx. Protein Concentrations	40ug/ml after reconstitution
External Database Links	UniProt: P09428 Related reagents  Entrez Gene: 281251 IL1B Related reagents
Product Information	Recombinant Bovine Interleukin-1 beta 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.
	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.
Protein Molecular Weight	17.7kD
Purity	>95% by SDS PAGE analysis
ELISA	This product may be used as a standard for ELISA applications with the following interleukin-1 beta antibodies: <u>AHP851Z</u> , <u>AHP851B</u> or <u>MCA1658</u> .
References	<ol> <li>Stradner, M.H. <i>et al.</i> (2008) Spingosine-1-phosphate stimulates proliferation and counteracts interleukin-1 induced nitric oxide formation in articular chondrocytes.         Osteoarthritis Cartilage. 16: 305-11.     </li> <li>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. Clin Vaccine Immunol. 17(11):1797-809.</li> <li>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>. Vet Res. 42: 49.</li> <li>Vordermeier, M. <i>et al.</i> (2012) Cytokine responses of Holstein and Sahiwal zebu derived monocytes after mycobacterial infection. Trop Anim Health Prod. 44: 651-5.</li> <li>Doull, L. <i>et al.</i> (2015) Late production of CXCL8 in ruminant oro-nasal turbinate cells in response to <i>Chlamydia abortus</i> infection. Vet Immunol Immunopathol. 168 (1-2): 97-102.</li> <li>Carroll, J.A. <i>et al.</i> (2017) In utero exposure to LPS alters the postnatal acute-phase response in beef heifers. Innate Immun. 23 (1): 97-108.</li> </ol>
Storage	Prior to reconstitution store at +4°C.

Following reconstitution store at -70°C.

Storage in frost-free freezers is not recommended.

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.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10302 available at: <a href="https://www.bio-rad-antibodies.com/SDS/PBP008">https://www.bio-rad-antibodies.com/SDS/PBP008</a> 10302
Regulatory	For research purposes only

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

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

 Email: antibody\_sales\_uk@bio-rad.com
 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 'M420065:230706'

## Printed on 18 Nov 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint

Email: antibody\_sales\_us@bio-rad.com