

## Datasheet: PBP007A

|                      |                                     |
|----------------------|-------------------------------------|
| <b>Description:</b>  | RECOMBINANT BOVINE INTERFERON GAMMA |
| <b>Name:</b>         | IFN GAMMA                           |
| <b>Other names:</b>  | INTERFERON GAMMA                    |
| <b>Format:</b>       | Rec. Protein                        |
| <b>Product Type:</b> | Recombinant Protein                 |
| <b>Quantity:</b>     | 25 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.

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| <b>Target Species</b>           | Bovine  |
| <b>Product Form</b>             | Purified recombinant protein - lyophilized  |
| <b>Reconstitution</b>           | Reconstitute with 100 µl sterile PBS containing 0.1% carrier protein<br>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. |
| <b>Preparation</b>              | Recombinant protein expressed in <i>Pichia pastoris</i> and purified by ion-exchange chromatography   |
| <b>Buffer Solution</b>          | Phosphate buffered saline   |
| <b>Preservative Stabilisers</b> | 10% Trehalose   |
| <b>External Database Links</b>  | <p><b>UniProt:</b><br/> <a href="#">P07353</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">281237</a> IFNG   <a href="#">Related reagents</a></p>  |

**Product Information**   **Recombinant Bovine interferon gamma**, (IFN $\gamma$ ), known previously as macrophage activating factor, belongs to the type II interferon family and is produced by T lymphocytes and NK cells.

Native bovine interferon gamma is a 143 amino acid cytokine with potent activating, anti-viral and anti-proliferative properties. It is produced as a pro-peptide with an additional 23 amino acid N-terminal signal peptide sequence having a molecular weight of ~20 kDa.

IFN $\gamma$  is predominantly secreted by activated T lymphocytes in response to specific mitogens as a result of infection and has numerous immunological regulatory functions. Properties include macrophage activation, upregulation of MHC class I and II molecules on various cells and induction of cytotoxicity.

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| <b>Protein Molecular Weight</b> | 16.9 kDa |
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| <b>Purity</b> | >95% by SDS PAGE analysis |
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| <b>ELISA</b> | This reagent has been used as a standard in a sandwich ELISA assay in conjunction with clone CC330 ( <a href="#">MCA2112</a> ) and clone CC302 ( <a href="#">MCA1783B</a> ) |
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|-------------------|---|
| <b>References</b> | <ol style="list-style-type: none"><li>1. Floss, M.M. <i>et al.</i> (2010) Expression and Immunogenicity of the Mycobacterial Ag85B/ESAT-6 Antigens Produced in Transgenic Plants by Elastin-Like Peptide Fusion Strategy. <a href="#">J Biomed Biotechnol. 2010: 274346.</a></li><li>2. Korzekwa, A.J. <i>et al.</i> (2011) Characterization of bovine immortalized luteal endothelial cells: action of cytokines on production and content of arachidonic acid metabolites. <a href="#">Reprod Biol Endocrinol. 9: 27.</a></li><li>3. Pujol, J. <i>et al.</i> (2015) Generation of a soluble recombinant trimeric form of bovine CD40L and its potential use as a vaccine adjuvant in cows. <a href="#">Vet Immunol Immunopathol. 168 (1-2): 1-13.</a></li><li>4. Soria, I. <i>et al.</i> (2018) Immune Response and Partial Protection against Heterologous Foot-and-Mouth Disease Virus Induced by Dendrimer Peptides in Cattle. <a href="#">J Immunol Res. 2018: 3497401.</a></li></ol> |
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| <b>Storage</b> | Prior to reconstitution store at +4°C.<br>After reconstitution store at -20°C.<br>Storage in frost-free freezers is not recommended. This product should be stored undiluted. |
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| <b>Shelf Life</b> | 12 months from date of despatch |
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| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10591 available at:<br>10591: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10591.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10591.pdf</a> |
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| <b>Regulatory</b> | For research purposes only |
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## Related Products

### Recommended Useful Reagents

[MOUSE ANTI BOVINE INTERFERON GAMMA:Biotin \(MCA1783B\)](#)

[MOUSE ANTI BOVINE INTERFERON GAMMA \(MCA2112\)](#)

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