

## Datasheet: HCA267

**BATCH NUMBER 1604**

|                      |                                 |
|----------------------|---------------------------------|
| <b>Description:</b>  | HUMAN ANTI BOVINE INTERLEUKIN-2 |
| <b>Specificity:</b>  | IL-2                            |
| <b>Format:</b>       | Purified                        |
| <b>Product Type:</b> | Monoclonal Antibody             |
| <b>Clone:</b>        | AbD21766                        |
| <b>Isotype:</b>      | HuCAL Fab monovalent            |
| <b>Quantity:</b>     | 0.1 mg                          |

## 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 |
|----------------------------|-----|----|----------------|--------------------|
| Flow Cytometry             | ▪   |    |                |                    |
| Immunohistology - Frozen   |     |    | ▪              |                    |
| Immunohistology - Paraffin |     |    | ▪              |                    |
| ELISA                      | ▪   |    |                |                    |
| Immunoprecipitation        |     |    | ▪              |                    |
| Western Blotting           |     |    | ▪              |                    |
| ELISpot                    | ▪   |    |                |                    |

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.

|                                 |   |
|---------------------------------|---|
| <b>Target Species</b>           | Bovine  |
| <b>Product Form</b>             | A monovalent human recombinant Fab (kappa light chain) selected from the HuCAL® phage display library, expressed in <i>E. coli</i> . The antibody is tagged with a DYKDDDDK tag and a HIS-tag (HHHHHH) at the C-terminus of the antibody heavy chain. |
| <b>Preparation</b>              | Metal chelate affinity chromatography   |
| <b>Buffer Solution</b>          | Phosphate buffered saline   |
| <b>Preservative Stabilisers</b> | 0.01% Thiomersal  |

|                                       |  |
|---------------------------------------|--|
| <b>Approx. Protein Concentrations</b> | Antibody concentration 0.5 mg/ml   |
| <b>Immunogen</b>                      | Fc-fusion protein containing the amino acid sequence 21-155 from bovine interleukin-2.   |
| <b>External Database Links</b>        | <p><b>UniProt:</b><br/> <a href="#">P05016</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">280822</a>   IL2   <a href="#">Related reagents</a></p>   |
| <b>Synonyms</b>                       | IL-2   |
| <b>Specificity</b>                    | <p><b>Human anti Bovine Interleukin-2, clone AbD21766</b> recognizes bovine interleukin-2 (IL-2), also known as T-cell growth factor (TCGF). Bovine IL-2 is a 155 amino acid secreted cytokine produced by T-cells following antigenic or mitogenic stimulation. It plays a crucial role in T-cell proliferation and immune regulation.</p> <p>Human anti bovine interleukin-2, clone AbD21766, has been successfully used for the detection and measurement of native and recombinant bovine IL-2 using intracellular flow cytometry, ELISPOT and ELISA.</p> <p>In ELISA and ELISPOT clone AbD21766 functions as the capture antibody in a sensitive assay for bovine IL-2 determination.</p> |
| <b>Affinity</b>                       | The monovalent intrinsic affinity of this antibody was measured as $K_D=0.3$ nM by real time, label-free molecular interaction analysis on recombinant bovine interleukin-2.   |
| <b>Flow Cytometry</b>                 | Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul. Membrane permeabilization is required for this application. Bio-Rad recommends the use of Leucoperm ( <a href="#">BUF09</a> ) for this purpose.  |
| <b>ELISA</b>                          | This product may be used as a capture antibody in a sandwich ELISA together with <a href="#">HCA268P</a> as the detection reagent.   |
| <b>Further Reading</b>                | <ol style="list-style-type: none"> <li>1. Rhodes, S.G. <i>et al.</i> (2014) Use of antigen-specific interleukin-2 to differentiate between cattle vaccinated with Mycobacterium bovis BCG and cattle infected with M. bovis. <a href="#">Clin Vaccine Immunol. 21:39-45.</a></li> <li>2. Whelan, A.O., <i>et al.</i> (2011) Development of an Antibody to Bovine IL-2 Reveals Multifunctional CD4 T(EM) Cells in Cattle Naturally Infected with Bovine Tuberculosis <a href="#">PLoS One. 6(12):e29194</a></li> </ol>  |
| <b>Storage</b>                        | <p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>   |

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| <b>Guarantee</b>                     | 12 months from date of despatch  |
| <b>Acknowledgements</b>              | Sold under license of U.S. Patents 6753136, 7785859 and 8273688 and corresponding patents. This antibody was developed by Bio-Rad, Zeppelinstr. 4, 82178 Puchheim, Germany.<br>His-tag is a registered trademark of EMD Biosciences. |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10094 available at:<br><a href="https://www.bio-rad-antibodies.com/SDS/HCA267">https://www.bio-rad-antibodies.com/SDS/HCA267</a><br>10094   |
| <b>Licensed Use</b>                  | For in vitro research purposes only, unless otherwise specified in writing by Bio-Rad  |
| <b>Regulatory</b>                    | For research purposes only   |
| <b>Technical Advice</b>              | Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the <a href="#">HuCAL Antibodies Technical Manual</a>  |

## Related Products

### Recommended Negative Controls

[HuCAL Fab-FH NEGATIVE CONTROL \(HCA045\)](#)

### Recommended Useful Reagents

[HUMAN ANTI BOVINE INTERLEUKIN-2 \(HCA268\)](#)

[5x ELISA COATING BUFFER \(BUF030A\)](#)

|                                  |   |                  |   |               |   |
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| <b>North &amp; South America</b> | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a> | <b>Worldwide</b> | Tel: +44 (0)1865 852 700<br>Fax: +44 (0)1865 852 739<br>Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a> | <b>Europe</b> | Tel: +49 (0) 89 8090 95 21<br>Fax: +49 (0) 89 8090 95 50<br>Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a> |
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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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