

## Datasheet: HCA267

<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 (1)	▪			
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.

**(1) Membrane permeabilization is required for this application. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.**

<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</b>	0.09% Sodium Azide (NaN <sub>3</sub> )

## Stabilisers

### Approx. Protein Concentrations

Antibody concentration 0.5 mg/ml.

### Immunogen

Fc-fusion protein containing the amino acid sequence 21-155 from bovine interleukin-2.

### External Database Links

#### UniProt:

[P05016](#)

[Related reagents](#)

#### Entrez Gene:

[280822](#)

IL2

[Related reagents](#)

### Synonyms

IL-2

### Specificity

**Human anti Bovine Interleukin-2, clone AbD21766** 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.

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.

In ELISA and ELISPOT clone AbD21766 functions as the capture antibody in a sensitive assay for bovine IL-2 determination.

### Affinity

The intrinsic affinity of the monovalent form of this antibody is  $K_D=0.3$  nM as measured by real time, label-free molecular interaction analysis on recombinant bovine interleukin-2.

### Flow Cytometry

Use 10µl of the suggested working dilution to label  $1 \times 10^6$  cells in 100µl.

### Further Reading

1. Rhodes, S.G. *et al.* (2014) Use of antigen-specific interleukin-2 to differentiate between cattle vaccinated with Mycobacterium bovis BCG and cattle infected with M. bovis. [Clin Vaccine Immunol. 21:39-45.](#)
2. Whelan, A.O., *et al.* (2011) Development of an Antibody to Bovine IL-2 Reveals Multifunctional CD4 T(EM) Cells in Cattle Naturally Infected with Bovine Tuberculosis [PLoS One. 6\(12\):e29194](#)

### Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

### Guarantee

12 months from date of despatch

**Acknowledgements** This product and/or its use is covered by claims of U.S. patents, and/or pending U.S. and non-U.S. patent applications owned by or under license to Bio-Rad Laboratories, Inc. See [bio-rad.com/en-us/trademarks](https://www.bio-rad.com/en-us/trademarks) for details.  
His-tag is a trademark of EMD Biosciences.

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/HCA267>  
10040

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**Licensed Use** For *in vitro* research purposes only, unless otherwise specified in writing by Bio-Rad

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**Regulatory** For research purposes only

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**Technical Advice** Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the [HuCAL Antibodies Technical Manual](#).

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## Related Products

### Recommended Negative Controls

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

### Recommended Useful Reagents

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

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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)  
'M433139:240919'

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