

Datasheet: HCA267

Description:	HUMAN ANTI BOVINE INTERLEUKIN-2
Specificity:	IL-2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD21766
Isotype:	HuCAL Fab monovalent
Quantity:	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.

	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.

Target Species	Bovine
Product Form	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.
Preparation	Metal chelate affinity chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Thiomersal
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 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.

Flow Cytometry

Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul. Membrane permeabilization is required for this application. Bio-Rad recommends the use of Leucoperm ([BUF09](#)) for this purpose.

ELISA

This product may be used as a capture antibody in a sandwich ELISA together with [HCA268P](#) as the detection reagent.

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

Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
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.

Shelf Life

12 months from date of despatch

Acknowledgements

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. His-tag is a registered trademark of EMD Biosciences.

**Health And Safety
Information**

Material Safety Datasheet documentation #10094 available at:
10094: <https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf>

Licensed Use

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

Regulatory For research purposes only

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

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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'M311350:171113'

Printed on 02 May 2018

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