

## Datasheet: HCA151A

Description:	HUMAN ANTI BOVINE CD282
Specificity:	CD282
Other names:	TLR2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD12542
Isotype:	HuCAL Fab bivalent
Quantity:	50 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="https://www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			
Immunohistology - Frozen				
Immunohistology - Paraffin				
ELISA				
Immunoprecipitation				
Western Blotting				
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.

Target Species	Bovine
Species Cross	Reacts with: Sheep

**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**

Reactivity

A bivalent human recombinant Fab (lambda light chain) selected from the HuCAL® phage display library, expressed in *E. coli*. This Fab fragment is dimerized via a helix-turn-helix motif. The antibody is tagged with a myc-tag (EQKLISEEDL) and a his-tag (HHHHHH) at

the C-terminus of the antibody heavy chain. This antibody is supplied lyophilized.

Reconstitution	Reconstitute with 0.5 ml distilled water
Preparation	metal chelate affinity chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin
Approx. Protein Concentrations	lg concentration 0.1 mg/ml after reconstitution
Immunogen	Fc-fusion protein containing the sequence 21-588 from bovine TLR2
External Database Links	UniProt:  Q95LA9 Related reagents  Entrez Gene:  281534 TLR2 Related reagents
RRID	AB_10863324
Specificity	Human anti Bovine CD282 antibody, clone AbD12542 recognizes bovine TLR2, otherwise known as CD282. TLR2 is a single-pass type 1 membrane protein belong to the Toll-like receptor (TLR) family and is expressed primarily by peripheral blood monocytes.  TLRs are expressed on the cell surface and the endocytic compartment and recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents. They also initiate cell signaling to induce production of cytokines necessary for the innate immunity and subsequent adaptive immunity.  TLR2 is reported to respond to a diverse range of bacterial cell wall components, mediating the innate immune response in co-operation with Ly96 and TLR1.
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul
References	<ol> <li>Kwong, L.S. <i>et al.</i> (2011) Characterisation of antibodies to bovine Toll-like receptor (TLR)-2 and cross-reactivity with ovine TLR2. <u>Vet Immunol Immunopathol. 139: 313-8.</u></li> <li>Garza-Cuartero Laura <i>et al.</i> (2016) <i>Fasciola hepatica</i> Infection Reduces <i>Mycobacterium bovis</i> burden and Mycobacterial Uptake and Suppresses the Pro-inflammatory Response <u>Parasite Immunology. Apr 25 [Epub ahead of print]</u></li> <li>Conejeros, I. <i>et al.</i> (2015) Effect of the synthetic Toll-like receptor ligands LPS, Pam3CSK4, HKLM and FSL-1 in the function of bovine polymorphonuclear neutrophils. <u>Dev Comp Immunol. 52 (2): 215-25.</u></li> </ol>
Storage	Prior to reconstitution store at +4°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 antibody. Should this product contain a precipitate we recommend microcentrifugation before use. Guarantee 12 months from date of reconstitution 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** Material Safety Datasheet documentation #10041 available at: Information 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf **Licensed Use** For in vitro research purposes only, unless otherwise specified in writing by Bio-Rad. Regulatory For research purposes only

technology can be found in the HuCAL Antibodies Technical Manual

After reconstitution store at -20°C.

# **Related Products**

**Technical Advice** 

## **Recommended Secondary Antibodies**

Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA5995...) HRP

Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA1396...) ALEXA FLUOR® 488, ALEXA FLUOR®

647, FITC

Recommended protocols and further information about HuCAL recombinant antibody

Mouse Anti Human C-MYC (MCA2200...) ALEXA FLUOR® 488, ALEXA FLUOR®

647, Biotin, FITC, RPE

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: +49 (0) 89 8090 95 50

Email: antibody sales us@bio-rad.com

Fax: +44 (0)1865 852 739 Email: antibody sales uk@bio-rad.com

Email: antibody sales de@bio-rad.com

From March 15, 2021, we will no longer supply printed datasheets with our products. Look out for updates on how to access your digital version at bio-rad-antibodies.com 'M334280:181127'

#### Printed on 09 Feb 2021

© 2021 Bio-Rad Laboratories Inc | Legal | Imprint