

Datasheet: HCA151F

Description:	HUMAN ANTI BOVINE CD282:FITC
Specificity:	CD282
Other names:	TLR2
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	AbD12542
Isotype:	HuCAL Fab bivalent
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			▪	
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 Reactivity

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

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 conjugated to fluorescein isothiocyanate (FITC) - liquid.

Max Ex/Em	Fluorophore FITC	Excitation Max (nm) 490	Emission Max (nm) 525
Preparation	Metal chelate affinity chromatography		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin		
Approx. Protein Concentrations	Ig concentration 0.1 mg/ml		
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_10846933		
Specificity	<p>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.</p> <p>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.</p> <p>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.</p>		
Flow Cytometry	Use 10µl of the suggested working dilution to label 1x10 ⁶ cells in 100µl		
References	<ol style="list-style-type: none">1. Kwong, L.S. <i>et al.</i> (2011) Characterisation of antibodies to bovine Toll-like receptor (TLR)-2 and cross-reactivity with ovine TLR2. Vet Immunol Immunopathol. 139: 313-8.2. Garza-Cuartero, L. <i>et al.</i> (2016) <i>Fasciola hepatica</i> infection reduces Mycobacterium bovis burden and mycobacterial uptake and suppresses the pro-inflammatory response. Parasite Immunol. 38 (7): 387-402.3. 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. Dev Comp Immunol. 52 (2): 215-25.		

4. Korbonits, L. *et al.* (2022) *Mycobacterium avium* subsp. *paratuberculosis* Infected Cows Reveal Divergent Immune Response in Bovine Peripheral Blood Derived Lymphocyte Proteome. [Metabolites. 12 \(10\)Sep 29 \[Epub ahead of print\]](#).

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

Health And Safety Information Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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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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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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