

## Datasheet: HCA151A647

<b>Description:</b>	HUMAN ANTI BOVINE CD282:Alexa Fluor® 647
<b>Specificity:</b>	CD282
<b>Other names:</b>	TLR2
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD12542
<b>Isotype:</b>	HuCAL Fab bivalent
<b>Quantity:</b>	100 TESTS/1ml

## 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			▪	
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 Alexa Fluor 647 - liquid

<b>Max Ex/Em</b>	<b>Fluorophore</b> Alexa Fluor®647	<b>Excitation Max (nm)</b> 650	<b>Emission Max (nm)</b> 665
<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> )		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	Ig concentration 0.1 mg/ml		
<b>Immunogen</b>	Fc-fusion protein containing the sequence 21-588 from bovine TLR2		
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">Q95LA9</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">281534</a> TLR2 <a href="#">Related reagents</a>		
<b>RRID</b>	AB_10841628		
<b>Specificity</b>	<p><b>Human anti Bovine CD282 antibody, clone AbD12542</b> 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>		
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul		
<b>References</b>	<ol style="list-style-type: none"><li>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. <a href="#">Vet Immunol Immunopathol. 139: 313-8.</a></li><li>2. 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 <a href="#">Parasite Immunology. Apr 25 [Epub ahead of print]</a></li><li>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. <a href="#">Dev Comp Immunol. 52 (2): 215-25.</a></li></ol>		

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**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.

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**Guarantee** 12 months from date of despatch

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**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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**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-dHLX-MH NEGATIVE CONTROL:Alexa Fluor® 647 \(HCA052A647\)](#)

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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](http://bio-rad-antibodies.com/datasheets)

'M391627:211015'

Printed on 15 Oct 2021