

## Datasheet: MCA2151GA

<b>Description:</b>	MOUSE ANTI HUMAN CD282
<b>Specificity:</b>	CD282
<b>Other names:</b>	TLR2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	TL2.1
<b>Isotype:</b>	IgG2a
<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	▪			1/10 - 1/50
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Functional Assays (1)	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) **This product contains sodium azide, removal by dialysis is recommended prior to use in functional assays. Bio-Rad recommend the use of [EQU003](#) for this purpose.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Marmoset, Cynomolgus monkey, Rhesus Monkey, Dog <b>N.B.</b> Antibody reactivity and working conditions may vary between species.
<b>Product Form</b>	Purified IgG - liquid
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Approx. Protein Concentrations</b>	IgG concentration 0.5mg/ml
<b>Immunogen</b>	CHO-TLR2 cells.

**External Database  
Links**

**UniProt:**

[O60603](#)   [Related reagents](#)

**Entrez Gene:**

[7097](#)   TLR2   [Related reagents](#)

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**Synonyms**

TIL4

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**Fusion Partners**

Spleen cells from immunised Balb/c mice were fused with cells of the NS0 myeloma cell line.

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**Specificity**

**Mouse anti Human CD282 antibody, clone TL2.1** recognizes human TLR2, otherwise known as CD282. TLR2 is a member of 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 signalling 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 MD-2.

Mouse anti Human CD282 antibody, clone TL2.1 is reported to block TLR2 function.

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**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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**Histology Positive  
Control Tissue**

Tonsil

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**References**

1. Lien, E. *et al.* (1999) Toll-like receptor 2 functions as a pattern recognition receptor for diverse bacterial products. [J Biol Chem. 274 \(47\): 33419-25.](#)
2. Flo, T.H. *et al.* (2001) Differential expression of Toll-like receptor 2 in human cells. [J Leukoc Biol. 69 \(3\): 474-81.](#)
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4. Karlsson, H. *et al.* (2004) Pattern of cytokine responses to gram-positive and gram-negative commensal bacteria is profoundly changed when monocytes differentiate into dendritic cells. [Infect Immun. 72: 2671-8.](#)
5. Maguire, M. *et al.* (2005) Comparative cell signalling activity of ultrapure recombinant chaperonin 60 proteins from prokaryotes and eukaryotes. [Immunology. 115: 231-8.](#)
6. Angel, C.E. *et al.* (2007) CD14+ antigen-presenting cells in human dermis are less mature than their CD1a+ counterparts. [Int Immunol. 19: 1271-9.](#)
7. Burgener, I.A. *et al.* (2008) Antibodies specific for human or murine Toll-like receptors detect canine leukocytes by flow cytometry. [Vet Immunol Immunopathol. 124: 184-91.](#)
8. Faure, E. *et al.* (2001) Bacterial lipopolysaccharide and IFN-gamma induce Toll-like receptor 2 and Toll-like receptor 4 expression in human endothelial cells: role of NF-kappa B activation [J Immunol. 166: 2018-24.](#)
9. Hart, A.L. *et al.* (2005) Characteristics of intestinal dendritic cells in inflammatory bowel diseases. [Gastroenterology. 129: 50-65.](#)
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11. Patel, D.N. *et al.* (2006) TLR4-NOX4-AP-1 signaling mediates lipopolysaccharide-induced CXCR6 expression in human aortic smooth muscle cells. [Biochem Biophys Res Commun. 347:](#)

[1113-20.](#)

12. Lindsay, J.O. *et al.* (2005) Clinical, microbiological, and immunological effects of fructo-oligosaccharide in patients with Crohn's disease. [Gut. 55: 348-55.](#)

13. Maiolini, A. *et al.* (2012) Toll-like receptors 4 and 9 are responsible for the maintenance of the inflammatory reaction in canine steroid-responsive meningitis-arteritis, a large animal model for neutrophilic meningitis. [J Neuroinflammation. 9: 226.](#)

14. Flo, T.H. *et al.* (2000) Human toll-like receptor 2 mediates monocyte activation by *Listeria monocytogenes*, but not by group B streptococci or lipopolysaccharide. [J Immunol. 164 \(4\): 2064-9.](#)

15. Flo, T.H. *et al.* (2002) Involvement of toll-like receptor (TLR) 2 and TLR4 in cell activation by mannuronic acid polymers. [J Biol Chem. 277 \(38\): 35489-95.](#)

16. Huang, D. *et al.* (2016) Hyperoxia induces inflammation and regulates cytokine production in alveolar epithelium through TLR2/4-NF- $\kappa$ B-dependent mechanism [Eur Rev Med Pharmacol Sci. 20: 1399-410.](#)

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**Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Shelf Life**

18 months from date of despatch.

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**Health And Safety Information**

Material Safety Datasheet documentation available at:  
Material Safety Datasheet Documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@549</a> , <a href="#">DyLight@649</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR8...)	<a href="#">DyLight@800</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Human Anti Mouse IgG2a (HCA037...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

'M261421:140924'

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