

Datasheet: MCA2151

Description:	MOUSE ANTI HUMAN CD282
Specificity:	CD282
Other names:	TLR2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	TL2.1
Isotype:	IgG2a
Quantity:	0.2 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	▪			1/10 - 1/50
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Functional Assays (1)	▪			

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.

(1) This product contains sodium azide, removal by dialysis is recommended prior to use in functional assays.

Target Species

Human

Species Cross Reactivity

Reacts with: Marmoset, Cynomolgus monkey, Rhesus Monkey, Dog

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

Purified IgG - liquid

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml
Immunogen	CHO-TLR2 cells.
External Database Links	<p>UniProt: O60603 Related reagents</p> <p>Entrez Gene: 7097 TLR2 Related reagents</p>
Synonyms	TIL4
RRID	AB_323980
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the NS0 myeloma cell line.
Specificity	<p>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.</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 signalling 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 MD-2.</p> <p>Mouse anti Human CD282 antibody, clone TL2.1 is reported to block TLR2 function.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
Histology Positive Control Tissue	Tonsil
References	<ol style="list-style-type: none"> Lien, E. <i>et al.</i> (1999) Toll-like receptor 2 functions as a pattern recognition receptor for diverse bacterial products. J Biol Chem. 274 (47): 33419-25. Flo, T.H. <i>et al.</i> (2001) Differential expression of Toll-like receptor 2 in human cells. J Leukoc Biol. 69 (3): 474-81. Bieback, K. <i>et al.</i> (2002) Hemagglutinin protein of wild-type measles virus activates toll-like receptor 2 signaling. J Virol. 76: 8729-36. Karlsson, H. <i>et al.</i> (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.](#)
 10. Melmed, G. *et al.* (2003) Human intestinal epithelial cells are broadly unresponsive to Toll-like receptor 2-dependent bacterial ligands: implications for host-microbial interactions in the gut. [J Immunol. 170: 1406-15.](#)
 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-κB-dependent mechanism [Eur Rev Med Pharmacol Sci. 20: 1399-410.](#)

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.

Guarantee

18 months from date of despatch.

Health And Safety Information

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

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 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

'M376454:210202'

Printed on 09 Feb 2021