Datasheet: MCA2152F

Description:	MOUSE ANTI HUMAN CD282:FITC
Specificity:	CD282
Other names:	TLR2
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	TLR2.3
Isotype:	IgG2a
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	▪			Neat - 1/10

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

Human

Product Form

Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% sodium azide (NaN_3)
1% bovine serum albumin

Approx. Protein Concentrations

IgG concentration 0.1 mg/ml

Immunogen	CHO cell line transfected with human TLR2 (CD282).
External Database Links	**UniProt:** O60603 Related reagents **Entrez Gene:** 7097 TLR2 Related reagents
Synonyms	TIL4
RRID	AB_324045
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the NS0 myeloma cell line.
Specificity	**Mouse anti Human CD282 antibody, clone TL2.3** 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.
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl
References	1. Flo, T.H. *et al.* (2001) Differential expression of Toll-like receptor 2 in human cells. J Leukoc Biol. 69 (3): 474-81. 2. Yilmaz, A. *et al.* (2006) Differential effects of statins on relevant functions of human monocyte-derived dendritic cells. J Leukoc Biol. 79 (3): 529-38. 3. Lee, R.M. *et al.* (2006) Influenza a viruses upregulate neutrophil toll-like receptor 2 expression and function. Scand J Immunol. 63 (2): 81-9. 4. Karlsson, K.R. *et al.* (2008) Homogeneous monocytes and macrophages from human embryonic stem cells following coculture-free differentiation in M-CSF and IL-3. Exp Hematol. 36 (9): 1167-75. 5. Sels, J.W. *et al.* (2012) Fractional flow reserve is not associated with inflammatory markers in patients with stable coronary artery disease. PLoS One. 7 (10): e46356. 6. Jankovicova, K. *et al.* (2012) TLR2 in pleural fluid is modulated by talc particles during pleurodesis. Clin Dev Immunol. 2012: 158287. 7. Krejsek, J. *et al.* (2013) TLR2 and TLR4 expression on blood monocytes and granulocytes of cardiac surgical patients is not affected by the use of cardiopulmonary bypass. Acta Medica (Hradec Kralove). 56 (2): 57-66. 8. Krejsek, J. *et al.* (2013) TLR2 and TLR4 expression on blood monocytes and

granulocytes of cardiac surgical patients is not affected by the use of cardiopulmonary bypass. Acta Medica (Hradec Kralove). 56 (2): 57-66.
9. Jaedicke, K.M. *et al.* (2013) Leptin up-regulates TLR2 in human monocytes. J Leukoc Biol. 93 (4): 561-71.
10. Al-Hassi, H.O. *et al.* (2014) Altered human gut dendritic cell properties in ulcerative colitis are reversed by *Lactobacillus plantarum* extracellular encrypted peptide STp. Mol Nutr Food Res. 58 (5): 1132-43.
11. Mann, E.R. *et al.* (2014) Human gut dendritic cells drive aberrant gut-specific t-cell responses in ulcerative colitis, characterized by increased IL-4 production and loss of IL-22 and IFNγ. Inflamm Bowel Dis. 20 (12): 2299-307.
12. Larsson, O. *et al.* (2018) Substance P represents a novel first-line defense mechanism in the nose. J Allergy Clin Immunol. 141 (1): 128-136.e3.

Further Reading	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.
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. This product is photosensitive and should be protected from light.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2152F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:FITC (MCA929F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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