

## Datasheet: MCA5891F

<b>Description:</b>	RAT ANTI MOUSE CD283:FITC
<b>Specificity:</b>	CD283
<b>Other names:</b>	TLR3
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	11F8
<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	■			Neat - 1/10
Immunofluorescence	■			

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species	Mouse		
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 <sub>3</sub> ) 1% Bovine Serum Albumin		
Approx. Protein	IgG concentration 0.1mg/ml		

## Concentrations

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Immunogen	Purified murine TLR3 extracellular domain protein.
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## External Database Links

### UniProt:

[Q99MB1](#)

[Related reagents](#)

### Entrez Gene:

[142980](#)

Tlr3

[Related reagents](#)

## Specificity

**Rat anti Mouse CD283 antibody, clone 11F8** recognizes mouse TLR3, otherwise known as CD283 or Toll-like receptor 3. CD283 is a 905 amino acid ~105 kDa single pass type 1 transmembrane glycoprotein associated with endosomal membranes and member of the Toll-like receptor (TLR) family. CD283 functions as a receptor for double-stranded RNA ([UniProt: Q99MB1](#)).

TLRs are expressed on the cell surface and the endocytic compartment and recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents. TLRs also initiate cell signaling to induce production of cytokines necessary for the innate immunity and subsequent adaptive immunity.

## Flow Cytometry

Use 10ul of the suggested working dilution to label  $10^6$  cells in 100ul.

## References

1. McCartney, S. *et al.* (2009) Distinct and complementary functions of MDA5 and TLR3 in poly(I:C)-mediated activation of mouse NK cells. [J Exp Med. 206: 2967-76.](#)
2. Jelinek, I. *et al.* (2011) TLR3-specific double-stranded RNA oligonucleotide adjuvants induce dendritic cell cross-presentation, CTL responses, and antiviral protection. [J Immunol. 186: 2422-9.](#)
3. McCartney, S.A. *et al.* (2011) RNA sensor-induced type I IFN prevents diabetes caused by a  $\beta$  cell-tropic virus in mice [J Clin Invest. 121: 1497-507.](#)
4. Azuma, M. *et al.* (2012) Cross-priming for antitumor CTL induced by soluble Ag + polyI:C depends on the TICAM-1 pathway in mouse CD11c(+)/CD8 $\alpha$ (+) dendritic cells. [Oncoimmunology. 1: 581-592.](#)
5. Zeng, R. *et al.* (2016) Generation and transcriptional programming of intestinal dendritic cells: essential role of retinoic acid. [Mucosal Immunol. 9 \(1\): 183-93.](#)
6. Njoroge, J.M. *et al.* (2018) A flow cytometric analysis of macrophage- nanoparticle interactions *in vitro*: induction of altered Toll-like receptor expression. [Int J Nanomedicine. 13: 8365-78.](#)

## 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/MCA5891F>  
10041

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:FITC \(MCA1212F\)](#)

### Recommended Useful Reagents

[LEUCOPERM \(BUF09\)](#)

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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

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