

Datasheet: MCA6078F

Description:	RAT ANTI MOUSE MHC CLASS II I-A/I-E:FITC
Specificity:	MHC CLASS II I-A/I-E
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	M5/114.15.2
Isotype:	IgG2b
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	▪			1/20

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	Mouse						
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
FITC	490	525					
Preparation	Purified IgG prepared by affinity chromatography						
Buffer Solution	Phosphate buffered saline						
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)						
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml						
Immunogen	Activated C57BL/6 mouse spleen cells.						

**External Database
Links**

UniProt:

[Q31161](#)

[Related reagents](#)

Fusion Partners

Immunized (BN x Lewis)_F₁ rat spleen cells were fused with the NS1 myeloma cell line.

Specificity

Rat anti Mouse MHC class II I-A/I-E antibody, clone M5/114.15.2 recognizes a polymorphic determinant shared by the mouse I-Ab/d/q and I-Ed/k MHC class II alloantigens expressed by mice of the H-2p/r/q/b/d/u haplotypes. This antibody does not recognize the I-Af/k/s MHC class II alloantigens.

The major histocompatibility complex (MHC) is a cluster of genes that are important in the immune response to infections. In mice, this complex is referred to as the histocompatibility 2 (H-2) region. MHC class II molecules are expressed by dendritic cells, B-cells and macrophages.

Flow Cytometry

Use 10ul of the suggested working dilution to label 1x10⁶ cells in 100ul

References

1. Anderson, M.S. & Miller, J. (1992) Invariant chain can function as a chaperone protein for class II major histocompatibility complex molecules. [Proc Natl Acad Sci U S A. 89 \(6\): 2282-6.](#)
2. Miyazaki, T. *et al.* (1996) Mice lacking H2-M complexes, enigmatic elements of the MHC class II peptide-loading pathway. [Cell. 84 \(4\): 531-41.](#)
3. Curtsinger JM *et al.* (1999) Inflammatory cytokines provide a third signal for activation of naive CD4⁺ and CD8⁺ T cells. [J Immunol. 162 \(6\): 3256-62.](#)
4. Tan, C.S.E. *et al.* (2017) CD8⁺ T cell evasion mandates CD4⁺ T cell control of chronic gamma-herpesvirus infection. [PLoS Pathog. 13 \(4\): e1006311.](#)
5. Lawler, C. & Stevenson, P.G. (2019) A CD4⁺ T cell/NK cell axis of γ-herpesvirus control. [J Virol. Nov 06 \[Epub ahead of print\].](#)

Storage

Store at +4°C. DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of despatch

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA6078F>
10040

Regulatory

For research purposes only

North & South Tel: +1 800 265 7376

America 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

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)

'M434204:250128'

