Datasheet: MCA6078F

BATCH NUMBER 153360

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

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

Preparation

Purified IgG prepared by affinity chromatography

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% 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)F_1 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 1x10^6 cells in 100ul
References	1. 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. 2. 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. 3. 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. 4. 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. 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 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