

# Datasheet: MCA2189F BATCH NUMBER 149491

Description:	MOUSE ANTI MOUSE MHC CLASS I:FITC
Specificity:	MHC CLASS I
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	2G5
Isotype:	lgG2b
Quantity:	0.1 mg

## **Product Details**

Applications	ications This product has been reported to work in the following applications. This informat				
	derived from testing within our laboratories, peer-reviewed publications or personal				
	communications from	the originators.	. Please r	refer to reference	s indicated for further
	information. For gener	al protocol rec	ommenda	ations, please vis	sit <u>www.bio-</u>
	rad-antibodies.com/pro	otocols.			
		Yes	Νο	Not Determined	Suggested Dilution
	Flow Cytometry	-			Neat - 1/5
	Where this antibody ha	as not been te	sted for u	se in a particular	<sup>·</sup> technique this does not
	necessarily exclude its	s use in such p	rocedure	s. Suggested wo	rking dilutions are given as
	a guide only. It is recor	mmended that	the user	titrates the antib	ody for use in their own
	system using appropria	ate negative\po	ositive co	ntrols.	
Target Species	Mouse				
Species Cross Reactivity	Reacts with: Rat, Guinea Pig, Sheep, Bovine, Pig, Human, Hamster <b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or				
	personal communication further information.	ons from the o	riginators	. Please refer to	references indicated for
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid				1 (FITC) - liquid
Max Ex/Em	Fluorophore	Excitation Ma	x (nm) E	Emission Max (nm	ו)
	FITC	490		525	
Preparation	Purified IgG prepared supernatant	by affinity chro	matograp	ohy on Protein A	from tissue culture
Buffer Solution	Phosphate buffered sa	aline			

Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Purified H-2K <sup>b</sup> and H-2D <sup>b</sup> MHC-I molecules.
RRID	AB_324079
Fusion Partners	Spleen cells from immunised C1D mice were fused with cells of the X63 myeloma cell line.
Specificity	<b>Mouse anti Mouse MHC Class I antibody, clone 2G5</b> recognizes a monomorphic epitope present on murine MHC class I molecules, expressed at varying levels on the majority of nucleated cells. 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.
	The epitope recognized by clone 2G5 is conformation dependent and is reported to be phylogenetically conserved ( <u>Claesson <i>et al.</i> 1994</u> ). Reactivity has been observed with some canine samples suggesting that this antibody may recognize a polymorphic epitope of canine MHC class I.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol> <li>Perone, M.J. <i>et al.</i> (2006) Dendritic cells expressing transgenic galectin-1 delay onset of autoimmune diabetes in mice. J Immunol. 177 (8): 5278-89.</li> <li>Vitadello, M. <i>et al.</i> (2010) Myofiber stress-response in myositis: parallel investigations on patients and experimental animal models of muscle regeneration and systemic inflammation. Arthritis Res Ther. 12 (2): R52.</li> <li>Huang, Y.C. <i>et al.</i> (2008) CD5-low expression lymphocytes in canine peripheral blood show characteristics of natural killer cells. J Leukoc Biol. 84 (6): 1501-10.</li> <li>Liu, C.C. <i>et al.</i> (2008) Transient downregulation of monocyte-derived dendritic-cell differentiation, function, and survival during tumoral progression and regression in an <i>in vivo</i> canine model of transmissible venereal tumor. Cancer Immunol Immunother. 57 (4): 479-91.</li> <li>Letellier, M. <i>et al.</i> (2008) Normal adult climbing fiber monoinnervation of cerebellar Purkinje cells in mice lacking MHC class I molecules. Dev Neurobiol. 68 (8): 997-1006.</li> <li>Gupta, A. <i>et al.</i> (2012) Efficacy of Mycobacterium indicus pranii immunotherapy as an adjunct to chemotherapy for tuberculosis and underlying immune responses in the lung. PLoS One. 7 (7): e39215.</li> <li>Giunchetti, R.C. <i>et al.</i> (2007) Immunogenicity of a killed Leishmania vaccine with saponin adjuvant in dogs. Vaccine. 25 (44): 7674-86.</li> <li>Cenci, E. <i>et al.</i> (2006) Modulation of phenotype and function of dendritic cells by a therapeutic synthetic killer peptide. J Leukoc Biol. 79 (1): 40-5.</li> <li>Giunchetti RC <i>et al.</i> (2008) A killed Leishmania vaccine with sand fly saliva extract and saponin adjuvant displays immunogenicity in dogs. Vaccine. 26 (5): 623-38.</li> </ol>

	10. Patel, G.K. <i>et al.</i> (2012) A humanized stromal bed is required for engraftment of isolated human primary squamous cell carcinoma cells in immunocompromised mice. J
	Invest Dermatol. 132 (2): 284-90. 11. Zuza, A.L. <i>et al.</i> (2016) Astrocyte response to St. Louis encephalitis virus. <u>Virus Res.</u>
	<ul> <li>217: 92-100.</li> <li>12. Lohan, P. <i>et al.</i> (2016) Culture expanded primary chondrocytes have potent immunomodulatory properties and do not induce an allogeneic immune response.</li> <li>Osteoarthritis Cartilage. 24 (3): 521-33.</li> <li>13. Gupta, A. <i>et al.</i> (2012) Protective efficacy of <i>Mycobacterium indicus pranii</i> against tuberculosis and underlying local lung immune responses in guinea pig model. Vaccine. 30 (43): 6198-209.</li> <li>14. Reid E <i>et al.</i> (2016) Type I and III IFNs Produced by Plasmacytoid Dendritic Cells in Response to a Member of the Flaviviridae Suppress Cellular Immune Responses. J Immunol. 196 (10): 4214-26.</li> <li>15. Iwasaki, Y. <i>et al.</i> (2016) Differentiation/Purification Protocol for Retinal Pigment</li> </ul>
	<ul> <li>Epithelium from Mouse Induced Pluripotent Stem Cells as a Research Tool. <u>PLoS One. 11</u></li> <li>(7): e0158282.</li> <li>16. Wang, Y. <i>et al.</i> (2020) Characterization of a rhodanese homologue from Haemonchus contortus and its immune-modulatory effects on goat immune cells <i>in vitro</i>. <u>Parasit</u> <u>Vectors. 13 (1): 454.</u></li> </ul>
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Further Reading	Vet Res. 39: 54.
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Storage	<ul> <li>1. Photo-Gd2ylack, L. (2008) Membrane markers of the inmune cells in swine. an update.</li> <li><u>Vet Res. 39: 54.</u></li> <li>Store at +4°C or at -20°C if preferred.</li> <li>This product should be stored undiluted.</li> <li>Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.</li> <li>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</li> </ul>
Guarantee	<ul> <li>Vet Res. 39: 54.</li> <li>Store at +4°C or at -20°C if preferred.</li> <li>This product should be stored undiluted.</li> <li>Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.</li> <li>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</li> <li>12 months from date of despatch</li> </ul>
Further Reading Storage Guarantee Health And Safety Information	1. Pinot-Gu2ylack, E. (2008) Membrane markers of the infinitule cells in swine. an update.         Vet Res. 39: 54.         Store at +4°C or at -20°C if preferred.         This product should be stored undiluted.         Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.         Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.         12 months from date of despatch         Material Safety Datasheet documentation #10041 available at:         https://www.bio-rad-antibodies.com/SDS/MCA2189F         10041
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### **Related Products**

#### **Recommended Useful Reagents**

MOUSE SEROBLOCK FcR (BUF041A) MOUSE SEROBLOCK FcR (BUF041B)

North & Sou	th Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21	
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50	То
	Email: antibody_sales_us@	bio-rad.com	Email: antibody_sales_uk@bi	o-rad.com	Email: antibody_sales_de@bio-ra	ad.comd a
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batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M366327:200529'

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