

Datasheet: MCA1044GA

BATCH NUMBER 0714

Description:	RAT ANTI DOG MHC CLASS II MONOMORPHIC
Specificity:	MHC CLASS II MONOMORPHIC
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	YKIX334.2
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	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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	Dog
Species Cross Reactivity	Does not react with:Hooded Seal
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide

Stabilisers

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0 mg/ml

Immunogen Con A activated canine peripheral blood cells.

RRID AB_11203404

Fusion Partners Spleen cells from immunised DA rats were fused with cells of the rat Y3/Ag1.2.3 myeloma cell line.

Specificity **Rat anti Dog MHC Class II Monomorphic antibody, clone YKIX334.2** recognizes a monomorphic epitope on canine MHC Class II and was classified at the First Canine Leucocyte Antigen Workshop ([Cobbald et al. 1994](#)). The major histocompatibility complex (MHC) is a cluster of genes that are important in the immune response to infections. In dogs, this is referred to as the dog leukocyte antigen (DLA) region. Rat anti Dog MHC Class II immunoprecipitates an antigen of ~32/34 kDa and blocks the proliferation of MHC Class II dependent responses *in vitro*. In dogs, MHC Class II is expressed by all peripheral blood mononuclear cells.

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

- References**
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 2. Watson, C.J. et al. (1994) Immunosuppression of canine renal allograft recipients by CD4 and CD8 monoclonal antibodies. [Tissue Antigens. 43 \(3\): 155-62.](#)
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 4. Araújo, M.S. et al. (2011) Immunological changes in canine peripheral blood leukocytes triggered by immunization with first or second generation vaccines against canine visceral leishmaniasis. [Vet Immunol Immunopathol. 141: 64-75.](#)
 5. Bonnefont-Rebeix, C. et al. (2007) Toll-like receptor 3 (TLR3): a new marker of canine monocytes-derived dendritic cells (cMo-DC). [Vet Immunol Immunopathol. 2007 Jul 15;118\(1-2\):134-9.](#)
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 8. Sanchez, M.A. et al. (2004) Organ-specific immunity in canine visceral leishmaniasis: analysis of symptomatic and asymptomatic dogs naturally infected with *Leishmania chagasi*. [Am J Trop Med Hyg. 70: 618-24.](#)
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10. Liu, Y. *et al.* (2000) Immunosuppressant-free allotransplantation of the trachea The antigenicity of tracheal grafts can be reduced by removing the epithelium and mixed glands from the graft by detergent treatment. [J Thorac Cardiovasc Surg. 120: 108-14.](#)
11. Larsen, A.K. *et al.* (2013) Entry and elimination of marine mammal *Brucella* spp. by hooded seal (*Cystophora cristata*) alveolar macrophages *in vitro*. [PLoS One. 8: e70186.](#)
12. Bonnefont-Rebeix, C. *et al.* (2016) Characterization of a novel canine T-cell line established from a spontaneously occurring aggressive T-cell lymphoma with large granular cell morphology. [Immunobiology. 221 \(1\): 12-22.](#)
13. Lin, S-C. *et al.* (2014) Immune Characterization of Peripheral Blood Mononuclear cells of the Dogs Restored from Innoculation of Canine Transmissible Venereal Tumor Cells. [Tai Vet J. 40 \(04\): 181-90.](#)
14. Constantinoiu, C.C. *et al.* (2015) Mucosal tolerance of the hookworm *Ancylostoma caninum* in the gut of naturally infected wild dogs. [Parasite Immunol. Jul 27 \[Epub ahead of print\].](#)
15. Lu, T. *et al.* (2017) Effects of cryopreservation on tracheal allograft antigenicity in dogs. [J Thorac Dis. 9 \(7\): 2038-2047.](#)

Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. 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/MCA1044GA10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC

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Printed on 28 May 2025