

Datasheet: MCA1044GA

BATCH NUMBER 151604

| 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

| 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 (Cobbold 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 <i>in vitro</i> . In dogs, MHC Class II is expressed by all peripheral blood mononuclear cells. |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul. |
| References | Cobbold, S. & Metcalfe, S. (1994) Monoclonal antibodies that define canine homologues of human CD antigens: summary of the First International Canine Leukocyte Antigen Workshop (CLAW). <u>Tissue Antigens. 43 (3): 137-54.</u> Watson, C.J. <i>et al.</i> (1994) Immunosuppression of canine renal allograft recipients by CD4 and CD8 monoclonal antibodies. <u>Tissue Antigens. 43 (3): 155-62.</u> Reis, A.B. <i>et al.</i> (2006) Phenotypic features of circulating leucocytes as immunological markers for clinical status and bone marrow parasite density in dogs naturally infected by <i>Leishmania chagasi</i>. <u>Clin Exp Immunol.146: 303-11.</u> Araújo, M.S. <i>et al.</i> (2011) Immunological changes in canine peripheral blood leukocytes triggered by immunization with first or second generation vaccines against canine visceral leishmaniasis. <u>Vet Immunol Immunopathol. 141: 64-75.</u> |

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- 6. Bund, D. *et al.* (2010) Canine-DCs using different serum-free methods as an approach to provide an animal-model for immunotherapeutic strategies. <u>Cell Immunol</u>. 263: 88-98.
- 7. Mito, K. *et al.* (2010) IFNγ markedly cooperates with intratumoral dendritic cell vaccine in dog tumor models. <u>Cancer Res. 70: 7093-101.</u>
- 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 tracheaThe antigenicity of tracheal grafts can be reduced by removing the epithelium and mixed glands from the graft by detergent treatment. <u>J Thorac Cardiovasc Surg. 120: 108-14.</u>

 11. Larsen, A.K. *et al.* (2013) Entry and elimination of marine mammal Brucella spp. by hooded seal (Cystophora cristata) alveolar macrophages *in vitro*. <u>PLoS One. 8: e70186.</u>

 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. <u>Immunobiology. 221 (1): 12-22.</u>
- 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. <u>Tai Vet J. 40 (04): 181-90.</u>
- 14. Constantinoiu, C.C. *et al.* (2015) Mucosal tolerance of the hookworm Ancylostoma caninum in the gut of naturally infected wild dogs. <u>Parasite Immunol. Jul 27 [Epub ahead of print].</u>

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/MCA1044GA 10040 |
| 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...) <u>DyLight®550</u>, <u>DyLight®650</u>, <u>DyLight®800</u>

Goat Anti Rat IgG (STAR131...) Alk. Phos., Biotin

Goat Anti Rat IgG (STAR72...)

Goat Anti Rat IgG (STAR69...)

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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

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