

Rat MHC CLASS II MONOMORPHIC Monoclonal Antibody

RAT ANTI DOG MHC CLASS II MONOMORPHIC:FITC

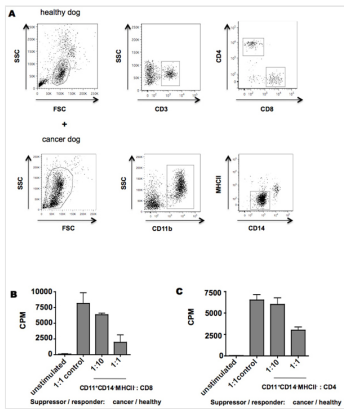
CATALOG # AAA49561	HOST Rat	APPLICATIONS Flow Cytometry, Functional Assay
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PRODUCT SYNONYMS

MHC CLASS II MONOMORPHIC; Monoclonal Antibody; RAT ANTI DOG MHC CLASS II MONOMORPHIC:FITC; anti-MHC CLASS II MONOMORPHIC antibody

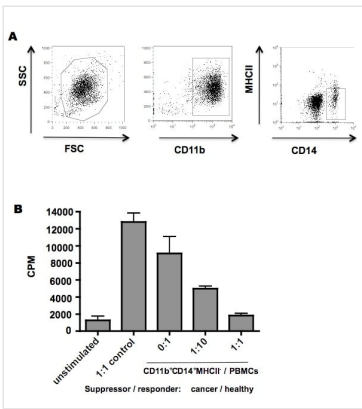
PRODUCT SPECIFICATIONS

Host	Rat
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	YKIX334.2
Form/Format	FITC Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid
Concentration	IgG concentration 0.1 mg/ml (varies by lot)
Applicable Applications for anti-MHC CLASS II MONOMORPHIC antibody	FCM/FACS (Flow Cytometry)
Perservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin Preparation
Buffer Solution	Phosphate buffered saline
Target Species	Dog
Preparation and Storage	Store at 4 degree C or at -20 degree C if preferred. This product should be stored undiluted. 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. Shelf Life: 18 months from date of despatch.



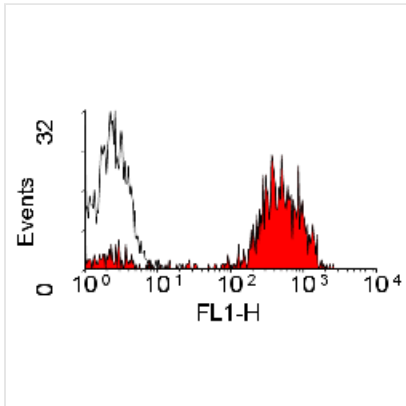
Application Data

Published customer image: CD11b+CD14-MHCII- cells suppress T cell proliferation. FACS sorted CD11b+CD14-MHCII- cells isolated from a dog with osteosarcoma or healthy PBMCs were co-incubated with mitogen-stimulated CD4+ and CD8+ T cells isolated from a healthy dog for 72 hs. No stimulated cells were used as negative control. Proliferative responses were measured by 3H-thymidine incorporation from experiments performed in triplicate. CPM, counts per minute. Mean +/- SEM are shown. From: Goulart MR, Pluhar GE, Ohlfest JR (2012) Identification of Myeloid Derived Suppressor Cells in Dogs with Naturally Occurring Cancer. PLoS ONE 7(3): e33274.



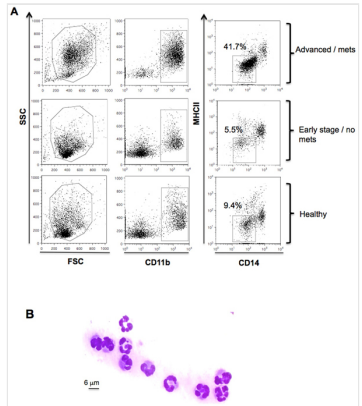
Application Data

Published customer image: CD11b+CD14-MHCII- cells demonstrate ability to suppress T cell proliferation. (A) CD11b+CD14-MHCII- cells were sorted from peripheral blood sample of an osteosarcoma dog (B) and co-cultured with healthy dog PBMCs in the presence of mitogen for 72 hs. Non-stimulated PBMCs were used as negative control and PBMCs co-cultured with healthy PMNs were used to control for the effect of adding cells to the assay. Proliferative responses were measured by 3H-thymidine incorporation. CPM, counts per minute. The experiment was performed in triplicate. Mean +/- SEM are shown. From: Goulart MR, Pluhar GE, Ohlfest JR (2012) Identification of Myeloid Derived Suppressor Cells in Dogs with Naturally Occurring Cancer. PLoS ONE 7(3): e33274.



Application Data

Staining of canine peripheral blood lymphocytes with Rat anti Canine MHC Class II: FITC



Application Data

Published customer image: Immunophenotyping gating strategy and morphological analysis for MDSC identification in peripheral blood of dogs. PBMCs from healthy dogs and dogs with cancer were stained for the myeloid marker CD11b, monocytic marker CD14 and MHC II. (A) Representative flow cytometric analysis of forward and side scatter and gated CD11b+CD14-MHCII- cells from dogs with advanced or metastatic tumors compared to dogs with early stage non-metastatic tumors and healthy control dogs. Plots are representative of dog with advanced metastatic hemangiosarcoma (top), early stage bladder transitional cell carcinoma (middle) and a healthy dog. (B) FACS sorted CD11b+CD14-MHCII- cells were stained with diff-quick for cell morphology evaluation. A representative example of polymorphonuclear granulocyte morphology of CD11b+CD14-MHCII- cells is shown at 63x magnification. From: Goulart MR, Pluhar GE, Ohlfest JR (2012) Identification of Myeloid Derived Suppressor Cells in Dogs with Naturally Occurring Cancer. PLoS ONE 7(3): e33274.

ADDITIONAL INFORMATION

Related Product Information for anti-MHC CLASS II MONOMORPHIC antibody

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 ~32/34kDa 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.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

