Datasheet: MCA1038A488

Description: RAT ANTI DOG CD4: Alexa Fluor® 488

Specificity: CD4

Format: ALEXA FLUOR® 488

Product Type: Monoclonal Antibody

Clone: YKIX302.9

Isotype: IgG2a

Quantity: 100 TESTS/1ml

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.

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<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
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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

Product Form
Purified IgG conjugated to Alexa Fluor® 488 - liquid

Max Ex/Em
Fluorophore | Excitation Max (nm) | Emission Max (nm)
--- | --- | ---
Alexa Fluor®488 | 495 | 519

Preparation
Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution
Phosphate buffered saline

Preservative Stabilisers
0.09% Sodium Azide
1% Bovine Serum Albumin

Approx. Protein Concentrations
IgG concentration 0.05 mg/ml

Immunogen
Canine concanavalin A activated T cell blasts.

External Database Links
UniProt: P33705
Related reagents

Entrez Gene:
Fusion Partners

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

Specificity

Rat anti Dog CD4 antibody, clone YKIX302.9, is a monoclonal antibody specific for the canine CD4 cell surface antigen. Clone YKIX302.9 was clustered at the first Canine Leukocyte Antigen Workshop (CLAW) [Cobbold et al. 1992] along with clone CA13.1E4.

Rat anti Dog CD4 (YKIX302.9) has been demonstrated to partially deplete circulating T lymphocytes when administered in vivo, but alone was not sufficient to prolong allograft survival in a canine transplant model (Watson et al. 1993).

Uniquely amongst mammals, canine CD4 is expressed by neutrophils as well as by lymphocytes subsets Moore et al. 1992. Rat anti Canine CD4 (YKIX302.9) forms part of a panel of anti canine monoclonal antibodies used extensively in the evaluation of leukemic status in dogs (Villiers 2002).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells or 100ul whole blood.

References

15. Tominaga, M. et al. (2010) Flow cytometric analysis of peripheral blood and tumor-infiltrating...

Storage

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.

**Shelf Life**
18 months from date of despatch.

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**Health And Safety Information**
Material Safety Datasheet documentation available at:

**Regulatory**
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**Related Products**

**Recommended Negative Controls**

**RAT IgG2a NEGATIVE CONTROL: Alexa Fluor® 488 (MCA1212A488)**

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