Datasheet: MCA1038A647

**Description:** RAT ANTI DOG CD4: Alexa Fluor® 647

**Specificity:** CD4

**Format:** ALEXA FLUOR® 647

**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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
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<tbody>
<tr>
<td>Flow Cytometry</td>
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<td>Neat - 1/10</td>
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</table>

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® 647 - liquid

**Max Ex/Em**

<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Excitation Max (nm)</th>
<th>Emission Max (nm)</th>
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</thead>
<tbody>
<tr>
<td>Alexa Fluor®647</td>
<td>650</td>
<td>665</td>
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</table>

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

**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 lymphocyte 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.

### Acknowledgements

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### Health And Safety Information

Material Safety Datasheet documentation available at:

### Regulatory

For research purposes only

### Related Products

**Recommended Negative Controls**

- RAT IgG2a NEGATIVE CONTROL: Alexa Fluor® 647 (MCA6005A647)
- RAT IgG2a NEGATIVE CONTROL: Alexa Fluor® 647 (MCA1212A647)

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