Datasheet: MCA1038PE

**Description:** RAT ANTI DOG CD4:RPE

**Specificity:** CD4

**Format:** RPE

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

Flow Cytometry

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 R. Phycoerythrin (RPE) - lyophilized

**Reconstitution**

Reconstitute with 1.0 ml distilled water

**Max Ex/Em**

<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Excitation Max (nm)</th>
<th>Emission Max (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPE 488nm laser</td>
<td>496</td>
<td>578</td>
</tr>
</tbody>
</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
5% Sucrose

**Immunogen**

Canine concanavalin A activated T cell blasts.

**External Database Links**

<table>
<thead>
<tr>
<th>UniProt:</th>
<th>Related reagents</th>
</tr>
</thead>
<tbody>
<tr>
<td>P33705</td>
<td></td>
</tr>
</tbody>
</table>

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 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 $10^6$ cells or 100ul whole blood.

**References**

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

**Storage**

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.
DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

12 months from date of reconstitution.

Health And Safety Information


Regulatory

For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL: RPE (MCA6005PE)
RAT IgG2a NEGATIVE CONTROL: RPE (MCA1212PE)