Datasheet: MCA1038PB

**Description:** RAT ANTI DOG CD4:Pacific Blue®

**Specificity:** CD4

**Format:** Pacific Blue®

**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](http://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>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td></td>
<td></td>
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<td>Neat - 1/5</td>
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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 Pacific Blue® - liquid

**Max Ex/Em**

<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Emission Max (nm)</th>
<th>Excitation Max (nm)</th>
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<tbody>
<tr>
<td>Pacific Blue®</td>
<td>455</td>
<td>410</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](http://www.uniprot.org/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 10^6 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


### Regulatory

For research purposes only

### Related Products

**Recommended Negative Controls**

RAT IgG2a NEGATIVE CONTROL: Pacific Blue® (MCA1212PB)
RAT IgG2a NEGATIVE CONTROL: PacificBlue® (MCA6005PB)