### Product Details

**Description:** RAT ANTI DOG CD4  
**Specificity:** CD4  
**Format:** Purified  
**Product Type:** Monoclonal Antibody  
**Clone:** YKIX302.9  
**Isotype:** IgG2a  
**Quantity:** 0.1 mg

#### Applications

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<thead>
<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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<tbody>
<tr>
<td>Flow Cytometry</td>
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<td>1/50 - 1/100</td>
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<td>Immunohistology - Frozen</td>
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<td>Immunohistology - Paraffin</td>
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<td>ELISA</td>
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<td>Immunoprecipitation</td>
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<td>Western Blotting</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 - liquid

#### 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 (NaN₃)

#### Carrier Free

Yes
Approx. Protein Concentrations

IgG concentration 1.0 mg/ml

Immunogen

Canine concanavalin A activated T cell blasts.

External Database Links

UniProt: P33705 Related reagents

Entrez Gene:

403931 CD4 Related reagents

Fusion Partners

Spleen cells from immunized 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 antibody, clone YKIX302.9 partially depletes circulating T lymphocytes when administered in vivo, but alone is 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).

Flow Cytometry

Use 10μl of the suggested working dilution to label 10^6 cells or 100μl whole blood

References


55. Konno, H. et al. (2022) An experimental challenge model for *Leishmania donovani* in beagle dogs, showing a similar pattern of parasite burden in the peripheral blood and liver. *Parasitol Res. 121 (12): 3569-79.*


61. Matralis, D.T. et al. (2023) Intracellular IFN-γ and IL-4 levels of CD4+ and CD8+ T cells in the peripheral blood of naturally infected (*Leishmania infantum*) symptomatic dogs before and following a 4-week treatment with miltefosine and allopurinol: a double-blinded, controlled and cross-sectional study. *Acta Vet Scand. 65 (1): 2.*


63. Tarone, L. et al. (2023) A chimeric human/dog-DNA vaccine against CSPG4 induces immunity with therapeutic potential in comparative preclinical models of osteosarcoma.
**Storage**

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

**Guarantee**

12 months from date of despatch

**Health And Safety Information**


**Regulatory**

For research purposes only

**Related Products**

**Recommended Secondary Antibodies**

- Rabbit Anti Rat IgG (STAR16...) **DyLight®800**
- Rabbit Anti Rat IgG (STAR17...) **FITC**
- Goat Anti Rat IgG (STAR72...) **HRP**
- Goat Anti Rat IgG (STAR69...) **FITC**
- Goat Anti Rat IgG (STAR73...) **RPE**
- Rabbit Anti Rat IgG (STAR21...) **HRP**
- Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) **DyLight®550, DyLight®650, DyLight®800**
- Goat Anti Rat IgG (STAR131...) **Alk. Phos., Biotin**

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)