

# Datasheet: MCA1039F

**BATCH NUMBER 154379**

<b>Description:</b>	RAT ANTI DOG CD8:FITC
<b>Specificity:</b>	CD8
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	YCATE55.9
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 mg

## 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).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/5

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 systems with appropriate negative/positive controls.

<b>Target Species</b>	Dog		
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative Stabilisers</b>	0.09% Sodium Azide		
	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml		

Immunogen	Canine CD8 alpha chimaeric human IgG1 Fc fusion protein.
External Database Links	<p><b>UniProt:</b>  <a href="#">P33706</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">403157</a>    CD8A    <a href="#">Related reagents</a></p>
RRID	AB_324550
Fusion Partners	Spleen cells from immunised DA rat were fused with cells of the Y3/Ag1.2.3 rat myeloma cell line.
Specificity	<p><b>Rat anti Dog CD8 antibody, clone YCATE55.9</b> was clustered as Canine CD8 in the First Canine Leukocyte Antigen Workshop (<a href="#">Cobbold et al. 1994</a>). YCATE55.9 reacts with a rat cell line transfected with cDNA for canine CD8<math>\alpha</math> (<a href="#">Gorman et al. 1994</a>) and blocks MHC class I dependant T-cell responses <i>in vitro</i> and <i>in vivo</i>.</p> <p>Rat anti Dog CD8, clone YCATE55.9 has been shown to deplete circulating CD8+ T cells when administered to dogs <i>in vivo</i>. (<a href="#">Watson et al. 1993</a>) Reduced levels of circulating CD8+ T cells has been associated with decreased survival times for dogs with osteosarcoma (<a href="#">Biller et al. 2010</a>).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol style="list-style-type: none"> <li>1. Cobbold, S. &amp; Metcalfe, S. (1994) Monoclonal antibodies that define canine homologues of human CD antigens: summary of the First International Canine Leukocyte Antigen Workshop (CLAW). <a href="#">Tissue Antigens. 43 (3): 137-54.</a></li> <li>2. Gorman, S.D. et al. (1994) Isolation and expression of cDNA encoding the canine CD4 and CD8 alpha antigens. <a href="#">Tissue Antigens. 43 (3): 184-8.</a></li> <li>3. Watson, C.J. et al. (1993) CD4 and CD8 monoclonal antibody therapy: strategies to prolong renal allograft survival in the dog. <a href="#">Br J Surg. 80 (11): 1389-92.</a></li> <li>4. Papadogiannakis, E.I. et al. (2009) Determination of intracellular cytokines IFN-gamma and IL-4 in canine T lymphocytes by flow cytometry following whole-blood culture. <a href="#">Can J Vet Res. 73 (2): 137-43.</a></li> <li>5. Benyacoub, J. et al. (2003) Supplementation of food with <i>Enterococcus faecium</i> (SF68) stimulates immune functions in young dogs. <a href="#">J Nutr. 133: 1158-62.</a></li> <li>6. Bird, R.C. et al. (2010) An autologous dendritic cell canine mammary tumor hybrid-cell fusion vaccine. <a href="#">Cancer Immunol Immunother. 60: 87-97.</a></li> <li>7. Bund, D. et al. (2010) Canine-DCs using different serum-free methods as an approach to provide an animal-model for immunotherapeutic strategies. <a href="#">Cell Immunol. 263: 88-98.</a></li> <li>8. Estrela-Lima, A. et al. (2010) Immunophenotypic features of tumor infiltrating lymphocytes from mammary carcinomas in female dogs associated with prognostic factors and survival rates. <a href="#">BMC Cancer. 10: 256.</a></li> <li>9. Huang, Y.C. et al. (2008) CD5-low expression lymphocytes in canine peripheral blood show characteristics of natural killer cells. <a href="#">J Leukoc Biol. 84: 1501-10.</a></li> <li>10. Kornegay, J.N. et al. (2010) Widespread muscle expression of an AAV9 human</li> </ol>

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1039F>  
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[RAT IgG1 NEGATIVE CONTROL:FITC \(MCA6004F\)](#)

**North & South** Tel: +1 800 265 7376

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'M364693:200529'

**Printed on 14 Mar 2024**