

Datasheet: MCA1039A700

Description:	RAT ANTI DOG CD8:Alexa Fluor® 700
Specificity:	CD8
Format:	ALEXA FLUOR® 700
Product Type:	Monoclonal Antibody
Clone:	YCATE55.9
Isotype:	IgG1
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.

	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.

Target Species	Dog		
Product Form	Purified IgG conjugated to Alexa Fluor 700 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®700	702	723
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin		
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		
Immunogen	Canine CD8 alpha chimaeric human IgG1 Fc fusion protein.		

External Database Links	UniProt: P33706 Related reagents Entrez Gene: 403157 CD8A Related reagents
RRID	AB_2075546
Fusion Partners	Spleen cells from immunized DA rat were fused with cells of the Y3/Ag1.2.3 rat myeloma cell line.
Specificity	<p>Rat anti Dog CD8 antibody, clone YCATE55.9 was clustered as Canine CD8 in the First Canine Leukocyte Antigen Workshop (Cobbold et al. 1994). YCATE55.9 reacts with a rat cell line transfected with cDNA for canine CD8α (Gorman et al. 1994) 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>. (Watson et al. 1993) Reduced levels of circulating CD8+ T cells has been associated with decreased survival times for dogs with osteosarcoma (Biller et al. 2010).</p>
Flow Cytometry	Use 10 μ l of the suggested working dilution to label 10 ⁶ cells in 100 μ l
References	<ol style="list-style-type: none"> Cobbold, S. & Metcalfe, S. (1994) Monoclonal antibodies that define canine homologues of human CD antigens: summary of the First International Canine Leukocyte Antigen Workshop (CLAW). Tissue Antigens. 43 (3): 137-54. Gorman, S.D. et al. (1994) Isolation and expression of cDNA encoding the canine CD4 and CD8 alpha antigens. Tissue Antigens. 43 (3): 184-8. Watson, C.J. et al. (1993) CD4 and CD8 monoclonal antibody therapy: strategies to prolong renal allograft survival in the dog. Br J Surg. 80 (11): 1389-92. 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. Can J Vet Res. 73 (2): 137-43. Benyacoub, J. et al. (2003) Supplementation of food with <i>Enterococcus faecium</i> (SF68) stimulates immune functions in young dogs. J Nutr. 133: 1158-62. Bird, R.C. et al. (2010) An autologous dendritic cell canine mammary tumor hybrid-cell fusion vaccine. Cancer Immunol Immunother. 60: 87-97. Bund, D. et al. (2010) Canine-DCs using different serum-free methods as an approach to provide an animal-model for immunotherapeutic strategies. Cell Immunol. 263: 88-98. 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. BMC Cancer. 10: 256. Huang, Y.C. et al. (2008) CD5-low expression lymphocytes in canine peripheral blood show characteristics of natural killer cells. J Leukoc Biol. 84: 1501-10. Kornegay, J.N. et al. (2010) Widespread muscle expression of an AAV9 human mini-dystrophin vector after intravenous injection in neonatal dystrophin-deficient dogs. Mol Ther. 18: 1501-8.

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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. This product is photosensitive and should be protected from light.

Guarantee

12 months from date of despatch

Acknowledgements

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Recommended Negative Controls

[RAT IgG1 NEGATIVE CONTROL:Alexa Fluor® 700 \(MCA6004A700\)](#)

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