

Datasheet: TC014

BATCH NUMBER 171960

Description:	ANTI DOG CD3:FITC/CD4:RPE/CD8:Alexa Fluor® 647
Specificity:	CD3/CD4/CD8
Format:	3 Color
Product Type:	Triple Color Reagent
Clone:	CA17.2A12 / YKIX302.9 / YCATE55.9
Isotype:	Cocktail
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

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Antibody Isotypes	CD3 FITC reagent: Mouse IgG1 CD4 RPE reagent: Rat IgG2a CD8 Alexa Fluor® 647 reagent: Rat IgG1		
Target Species	Dog		
Product Form	Triple Color combination consisting of FITC, RPE, Alexa Fluor® 647 conjugated monoclonal antibodies mixed in optimal ratio - lyophilized		
Reconstitution	Reconstitute with 1.0 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
	FITC	490	525
	RPE 488nm laser	496	578
	RPE 561nm laser	546	578
Preparation	Purified IgG from tissue culture supernatant		

Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin 5% Sucrose
External Database Links	<p>UniProt:</p> <p>P27597 Related reagents</p> <p>P33705 Related reagents</p> <p>P33706 Related reagents</p> <p>Entrez Gene:</p> <p>442981 CD3E Related reagents</p> <p>403931 CD4 Related reagents</p> <p>403157 CD8A Related reagents</p>
RRID	AB_808411
Specificity	<p>Anti Dog CD3:FITC/CD4:RPE/CD8:Alexa Fluor® 647 is a triple color reagent recognizing canine CD3, CD4 and CD8 cell surface antigens. FITC conjugated Mouse anti Canine CD3 antibody, clone CA17.2A12 (MCA1477F) recognizes canine CD3, expressed by T lymphocytes. RPE conjugated Mouse anti Canine CD4 antibody, clone YKIX 302.9 (MCA1038PE) recognizes canine CD4, expressed by lymphocyte subsets and canine neutrophils. Alexa Fluor®647 conjugated Mouse anti Canine CD8 antibody, clone YCATE55.9 (MCA1039A647) recognizes CD8 alpha, expressed by cytotoxic T cells.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> Sakai, M <i>et al.</i> (2006) Phenotypic analysis of hepatic T lymphocytes in a dog with chronic hepatitis. J Vet Med Sci. 68:1219-1221 Guzera, M. <i>et al.</i> (2016) <i>In Vitro</i> Influence of Mycophenolic Acid on Selected Parameters of Stimulated Peripheral Canine Lymphocytes. PLoS One. 11 (5): e0154429. Maina, E. <i>et al.</i> (2019) Food allergen-specific sublingual immunotherapy modulates peripheral T cell responses of dogs with adverse food reactions. Vet Immunol Immunopathol. 212: 38-42. Franco-Molina, M.A. <i>et al.</i> (2018) Autologous canine immunotherapy: short-time generated dendritic cells loaded with canine transmissible venereal tumor-whole lysate. Immunopharmacol Immunotoxicol. 40 (5): 437-43. Jaensch, S.M. <i>et al.</i> (2022) Clinicopathologic and immunophenotypic features in dogs with presumptive large granular lymphocyte leukaemia. Aust Vet J. 100 (11): 527-32. Stokol, T. <i>et al.</i> (2024) Flow cytometric-based detection of CD80 is a useful diagnostic marker of acute myeloid leukemia in dogs. Front Vet Sci. 11: 1405297. Maina, E. <i>et al.</i> (2025) Exploring CD4 +CD8 + double-positive T cells in canine allergy and health: A pilot study. Vet Immunol Immunopathol. 284: 110924.
Storage	This product is shipped at ambient temperature.

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.

Guarantee 12 months from date of despatch

Acknowledgements This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com

Health And Safety Information Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/TC014>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MSE IgG1:FITC/RAT IgG2a:RPE/RAT IgG1:Alexa Fluor® 647 -ve CONTROL \(TC023\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M441681:250523'

Printed on 24 Feb 2026